SUMMARY/RESPONSE TO COMMENTS FROM THE THIRD COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from November 1, 2000 through November 30, 2000, on IDEM's proposed rule language. IDEM received comments from the following parties:

Phillip G. Anderson, Indiana Beef Cattle Association (IBCA)
Tom Anderson, Save the Dunes Council (STD)
Jeffrey S. Angus (JA)
Julie Angus (JUA)
Barry Banks (BBAN)
Paul Wm. Brennan, Indiana State Poultry Association, Inc. (ISPA)
Tom and Deb Brodfeld (TDB)
Russell J. Clark, Clark and Clark (CC)
David Curry (DCU)
Brian Daggy, Indiana Farm Bureau (IFB)
Jack Dold, Pretty Lake Conservation Club, Inc. (PLCC)
Catherine Ehlhardt, Eli Lilly and Company (ELC)
Jim Erickson (JER)
Jim Erickson (JER-2)
Chips Everhart, Rose Acre Farms (RAF-CE)
Maurice O. Fuller (MOF)
Stephen J. Gunn, Stewart Seeds, Inc. (SG)
Fred D. Hanson (FDH)
John D. Hardin, Jr. (JDH)
Jeffry Healy, PE, Banning Engineering (BE)
Dona Hile (DHI)
Mrs. Marilyn Hile (MHI)
Scott and Tammi Hile (SHI)
Richard Hill (RHI)
Fritz Holzgrefe, Jr., Agrivest, Inc. (AGRI)
Jim Hoyer, Citizens Action Coalition (CAC)
Levi J. Huffman, Wise-Huffman Farms (LH)
Jerry C. Jackle (JJA)
John F. Jackle (JJ)
Cal Jackson, Creighton Brothers (CBR)
Judy Keat (JKE)
Tammy Lawson (LAW)
Mark Legan (MLE)
Erle G. Lockhart (EGL)
Mary Jane Lockhart (MJL)
Stephen A. Loeschner (SLOE)
Dean Lowry, L & L Hog Farm (DLO)
Mark Martin (MMA)
Richard Martin (RMA)
Phil McLoud, United States Department of Agriculture, Natural Resources Conservation Service (USDA)
Jeanne Melchior, Protect Our Woods (POW)
Gerald A. Mennen, Indiana Pork Producers Association (IPPA)
Michael A. Mullet (MAM)
Scott J. Nally, Perdue Farms (PFI)
Kent J. Peter (KJP)
Larry and Robert Pumphrey, Ag Production Enterprises, Inc. (APW)
Chris Reeves, Christine Reeves, Cathy Reeves, and Mark Reeves (CMR)
Rae Schnapp, Ph.D., Hoosier Environmental Council (HEC)

Keith A. Schoettmer, Schoettmer Prime Pork Farm, Inc. (KSCH)
Roger L. Seger, Wabash Valley Produce, Inc. (WVP)
Pete Shiniger, Midwest Poultry Services (PSH)
Gordon Smiley (GS)
Vanessa Lee Smith (VLS)
Judy Stroch (JSTR)
Anthony C. Sullivan, Barnes & Thornburg (BTH)
Jim Sweeney (JSW)
Jim Tarnowski (JTAR)
Jeff Taylor (JTAY)
Bruce E. Thomson (BET)
John R. Thomson, Thomson & Associates (JRT)
Rod and Ann Tobar (RAT)
Jo Lynn Traub, United States Environmental Protection Agency, Region 5 (USEPA)
Sandra W. Tokarski (SWT)
Thomas R. Tokarski (TRK)
Ron Westerfeld (REW)
Mark and Chris York (MCY)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: The confined feeding rule should be revised. The proposed rule does not protect Indiana's water resources. (BBAN) (MAM) (SWT) (STD) (TRK) (RHI) (PLCC) (JKE) (FDH) (DCU) (JSW) (POW) The rules as written should not be adopted. (SLOE) The amount of wastes these facilities produce require mandatory, stringent rules to protect the surface and ground waters of the state. (JSW)

Response: Potential impacts to water quality can be caused by improper design of waste storage facilities and poor manure land application activities. The proposed rule increases IDEM's regulatory standards for both of these concerns. IDEM believes the rule increases the effectiveness of the current regulatory program to further protect Indiana's water resources.

Comment: This rule needs to focus on water quality and not stray into other agricultural issues. (IBCA) (AGRI) (KSCH) (EGL) IDEM has limited itself by writing rules that only deal with water quality issues. The ill affects CAFOs can have on air quality and human health have been largely ignored. (CAC)

Response: Water quality problems have the potential to impact human health. The proposed rule would allow IDEM to address potential problems during the review process. The best management practices in the rule help protect the health of Indiana's citizens.

The specific authority granted by the legislature for this rulemaking directs the Water Pollution Control Board to adopt rules. The Water Pollution Control Board is charged with adopting rules to protect the water quality in the state. Therefore, issues that fall within the authority of the other boards, such as air quality, are not being addressed in this rulemaking.

Comment: Producers need to be treated fair. Please reconsider your revised rules. (MJL) Do you as members of the Indiana State Water Board feel these new rules proposals brought to you by IDEM are fair and equitable treatment of Indiana's livestock industry in comparison to other industries and sources of water pollution within our State? If not, why would you enact these proposals? I know a huge amount of time has been spent developing these complex set of rules, but if you feel they are not fair and equitable, then it is your duty to have them simplified and restated as you the Indiana State Water Board directs IDEM. (GS)

Response: IDEM believes all producers are being treated fairly. IDEM has spent three years developing a regulation in a manner involving interested parties, including agricultural industry representatives.

Comment: CAFOs must have individual NPDES permits to control the amount of pollution they discharge and to allow enforcement for any violations. In fact, no one can discharge into waters of the United States (including

groundwater) without an NPDES permit. (STD)

Response: IDEM's proposed rule will enhance the current concentrated animal feeding operation (CAFO) permitting process providing the same protection to Indiana as an individual NPDES permit. At the point at which a confined feeding operation actually discharges, it is required by law to apply for an individual NPDES permit.

Comment: Our preliminary review indicates that the rule does not yet meet the requirements for a general NPDES permit for CAFOs. Specifically, it does not meet the requirements in 40 CFR 122.28 (pertaining to general NPDES permits), 122.41 (containing conditions applicable to all NPDES permits), and 122.44 (containing requirements for the establishment of limitations, standards, and other conditions in all permits). The following is a list of the specific provisions of the above-cited regulations that we recommend be further considered such that Article 16, when submitted to the USEPA as a proposed general NPDES permit, meets the requirements for such permits.

<u>40 CFR 122.28 General permits</u>
(a)(1) Area.
(a)(2) Sources.
(b)(2)(i) Authorization.
(b)(2)(iii) Deadline for submitting notices of intent to be covered and the dates when authorization under the permit is provided.

<u>40 CFR 122.41 Conditions applicable to all permits</u>
(Note: all of the conditions in 40 CFR 122.41 must be incorporated into permits either expressly or by reference.)
122.41(a) Duty to comply.
122.41(b) Duty to reapply.
122.41(c) Need to halt or reduce activity not a defense.
122.41(h) Duty to provide information.
122.41(i) Inspection and entry. Rule 4, section 2(5) should be revised to provide that the Regional Administrator has all the authority established in paragraphs (A) through (D). In making this revision, the Department can clarify that the Regional Administrator's authority is limited only to those confined feeding operations and other animal feeding operations which are CAFOs.
122.41(j) Monitoring and records, paragraphs (1) through (3) and (5).
122.41(k) Signatory requirement.
122.41(l) Reporting requirements, paragraphs (2), (3), and (6)(ii)(C), and (8).

<u>40 CFR 122.44 Establishing limitations, standards, and other permit conditions.</u>
(a) Technology-based effluent limitation and standards.
(d) Water quality-based effluent limitations and standards.
(k) Best management practices.
(USEPA)

Response: IDEM will continue to work with EPA outside this rulemaking to address NPDES issues for those producers designated as federal CAFOs. IDEM is publishing a first notice of rulemaking in the Indiana Register on March 1to specifically address NPDES issues with respect to federal CAFOs.

Comment: Compliance with the terms of an approval for a Confined Feeding Operation should provide an "approval shield" and should constitute compliance with the Clean Water Act, the corresponding state regulations, and all confined feeding provisions for the operation covered by the approval. If the confined feeding rules are changed, the approval should continue to constitute all applicable requirements until such time as the approval is modified to incorporate any new requirements. (BTH)

Response: IDEM will continue to work with EPA outside this rulemaking to address NPDES issues for those producers designated as federal CAFOs. The proposed rule does not provide an "approval shield".

Comment: The rule should focus strictly and narrowly on issues around confined feeding and animal wastes. It should not overlap with NPDES by covering NPDES-permitted operations, it should not include spills or discharges of materials not unique to confined feeding operations, which are covered under 327 IAC 2-6.1, and where it uses terms of art from other water regulations, such as "flood plain," "surface water" and "wetlands," it should employ the exact wording used in those regulations in order to avoid confusion on the part of persons subject to more than one regulation.

(ELC)

Response: This rule does not overlap with NPDES regulations. Certain definitions are different than those in other regulations to deal with the unique circumstances in this rule.

Comment: In order to avoid endless contention, the rule, or guidance adopted pursuant to the rule, should clearly define acceptable test methods and reference standards. (ELC)

Response: Because the rule is based on performance standards, many methods of demonstrating compliance may be acceptable. The guidance document will provide references to design standards and nutrient management standards.

Comment: IDEM needs to make new recods for us to use for self-monitoring management reports, emergency response plans, land application records including amount and type of manure, location of application, agronomic rate, application rate, and method, test results and date of application records on marketing and distribution of manure to other parties must be kept. These forms need to be easy to fill out and the same forms for all operations. (MHI) (TDB) (RAT) (DHI)(SHI) (JER) (JTAY) (MCY) (MMA)

Response: IDEM will provide sample forms as part of the guidance document.

Comment: The cost to implement this new system should not be cost prohibitive. Small to medium size operations cannot afford to spend $175 to $1200. (MHI) (TDB) (DHI) (RAT) (SHI) (JER) (JTAY) (MCY) (MMA) (JA) The proposed Confined Feeding Rule must be cost-effective. (BTH) The cost of being permitted should be a set, low fee no matter what size or design of the operation. It looks to me as if someone is on a money making mission instead of truly trying to make a farm operation safer and cleaner for all of us. (BET) Lagoon operations have an additional burden of cost ranging from $200-$4,000 for site inspections. Spray irrigation operations incur additional costs from $800-$1,500. This is a heavy burden for producers. (JA)

Response: IDEM believes this rule provides a practical and cost-effective way to ensure good management practices and to protect water quality. Most of the provisions reflect management practices that producers should already have implemented to run a good operation.

Comment: The fiscal impact study does not fairly represent the economic impact it will have on producers. Show me a certified engineer that will work for $20 an hour. I am also afraid that producers may not get the best rates from lending institutions because of the added risk from a 5-year renewal of a permit. (KJP)

Response: The fiscal impact statement provides information on the approximate cost of compliance with the rule, as required by law. Many of the costs mentioned in the comment are case-specific and unquantifiable. IDEM has worked with many constituents to develop the numbers represented in the fiscal impact statement. IDEM believes it accurately reflects the range of costs incurred by complying with the rule. Many businesses face limited time permits which must be renewed in order for the business to operate. The $20 cost referenced in the fiscal impact document does not require a certified engineer.

Comment: 327 IAC 16-1; This section of the rule should provide that portions of a confined feeding operation or other animal feeding operation whose discharges are regulated by, and subject to a NPDES permit under 327 IAC are not subject to 327 IAC 16. Alternatively, it might provide that compliance with such a permit constitutes compliance with all the requirements of 327 IAC 16, including the requirement to obtain a CFO approval. While 327 IAC 16-1-4 properly provides that a confined feeding operation approval satisfies a NPDES permit requirement, the rule should also provide that an existing NPDES permit satisfies 327 IAC 16, or that activities covered by such a NPDES permit are exempted from 327 IAC 16. The two programs should not overlap. (ELC)

Response: IDEM is publishing a first notice of rulemaking specifically to address NPDES related issues for federal CAFOs in the Indiana Register on March 1. IDEM will continue to work with EPA outside this rulemaking to address NPDES issues for those producers designated as federal CAFOs.

Comment: 327 IAC 16-1; This section when read in conjunction with the definitions in Rule 2, greatly broadens the scope of IDEM's authority over confined feeding operations. This extension of applicability blatantly goes beyond legislative intent and brings into question the wisdom of "combining animals". Besides the additional cost to IDEM, the Agency is potentially bringing in thousands of additional farms. We suggest a comprehensive educational effort be put forth by IDEM to inform all persons impacted by the rule of their liability. (IPPA)

Response: The statutory definition of "confined feeding operation" specifies which existing or proposed farms must comply with the confined feeding requirements. The statute and proposed rule requires a confined feeding approval for operations with 300 or more cattle, 600 or more swine or sheep or 30,000 or more fowl in a confined area for at least 45 days during any 12-month period, and that ground cover is not sustained over at least 50 % of the confinement area. IDEM does not believe this rule will bring thousands of farms into the program. Throughout the rulemaking effort, IDEM has provided many public participation and educational opportunities for the persons impacted by the rule. IDEM will continue the effort to educate all interested parties about the requirements of the rule. Liability issues can vary greatly and will be addressed directly during specific enforcement cases.

Comment: 327 IAC 16-1-1; The section uses the term "land application". This term is not defined in this regulation. From the context, it appears this term should be "manure application." (ELC)

Response: References to "land application" in this article mean the application of manure to the ground. The language in 327 IAC 16-1-1 has been changed to clarify the meaning.

Comment: 327 IAC 16-1-2(a); The compliance timeline here should provide that "other animal feeding operations" subsequently added to the list via 327 IAC 16-2-29(5) should have a compliance schedule beginning on the date the Commissioner makes a determination including them in the rule per 327 IAC 16-2-29(5). The following language is suggested:

"After the date the Commissioner determines that a type of operation is an 'other animal feeding operation' as defined in 327 IAC 16-2-29(5) and must comply with this article:

(1) if the operation does not already have a valid approval to operate, the owner/operator shall submit a complete application for an approval within one (1) year of the adoption of the determination. In this case, 327 IAC 16-4-1 shall apply on and after the date two (2) years after the adoption of the determination.

(2) an operation is an "existing other animal feeding operation" if it commenced construction prior to the adoption of determination.

(3) for determinations under 327 IAC 16-2-29(5) which add to the types of 'other animal feeding operation', except as noted in this section, the 'effective date of this rule' shall be the date of adoption of the determination.

(4) for determinations under 327 IAC 16-2-29(5) which add to the types of 'other animal feeding operation', and 'existing manure management structure' shall be one which is constructed, or for which an application for approval is received, prior to the adoption of the determination."

(ELC)

Response: "Other animal feeding operations" that are determined to be subject to this article by a decision of the Commissioner after the effective date of this article shall be expected to submit an application as a new operation. Compliance with all applicable parts of the article will be on the effective date of the approval or as specified in the approval. IDEM does not believe any change to the rule language is needed.

Comment: 327 IAC 16-1-2(b); What triggers the request by the Commissioner to submit a renewal application? IDEM should clarify in the rule that the criteria necessary to make a renewal request prior to the 5-year time frame must be based on factual evidence that shows there is meaningful threat to water quality. (IPPA)

Response: The provision in 327 IAC 16-1-2(b) will provide the mechanism to bring existing operations into compliance with the new rules. It is IDEM's intent to stagger the approval renewals for existing operations so that they are not all submitted at the same time, making it impossible to process the renewals in a timely manner. This is only an administrative trigger to bring existing operations into the new program and will not be used after the first renewal cycle under the new rules. Additional language has been added to clarify the intent. Threats to water quality can be addressed by the Commissioner under "Modifications and notifications" in 327 IAC 16-7-5, or "Revocation" in 327 IAC 16-7-6.

Comment: 327 IAC 16-2-1; The definition of "agronomic rate" should refer to the approved or standard reference methodologies for making the various measurements, analyses, and determinations that will be needed. If the references will be in the Guidelines, it may be simplest to simply include a section of the rule that states that the applicable reference methodologies may be found in the Guidelines. The use of a public process to identify measurement methods would help

ensure that both cost and technical issues are considered in choosing appropriate methods and approved alternatives. (ELC)

Response: Methodologies will be discussed in the guidance document, but IDEM will look to Natural Resources Conservation Service and Purdue University primarily to evaluate proposed methodologies.

Comment: 327 IAC 16-2-1(5); This language is overly broad and virtually unlimiting. How do I know something I cannot measure? This subsection should be eliminated. (IPPA)

Response: Responsible farmers know types and sources of nutrients that have been added to their fields. This is a common planning tool. Though not an exact science, this information can and should be used when determining an agronomic rate to use for the application of manure. Refer to Natural Resource Conservation Service (NRCS) for guidance on assessing sources of nutrients.

Comment: 327 IAC 16-2-2; This should read: "'Bedrock' means cemented or consolidated earth materials either exposed on the earth's surface or underlying unconsolidated earth materials." (ELC)

Response: IDEM has provided a less specific definition to allow for site-specific determinations about bedrock.

Comment: 327 IAC 16-2-4; Confined feeding preamble or guidance should discuss the term "confined feeding", or the definition should be significantly expanded to include explanatory material. It needs to clarify if the rule applies to research animals, animals raised for leather or other body parts, zoos, kennels, circuses, or race tracks. (ELC)

Response: The definition of "confined feeding" is statutory. The guidance will provide further clarification.

Comment: 327 IAC 16-2-5; The preamble, guidance or rule language must clarify how geography figures into the determination of a confined feeding operation. If a single entity owns two adjacent farms, is this a single confined feeding operation? If farms are owned by different owners, but operated by a single operator, if they are owned by one person and leased by two operators, if they are across the road from each other, if they are across a creek or river from each other, if they are not touching or across from each other in any way but are operated as a single business activity, are they a single confined feeding operation? If no part of the land need touch, how far apart must they be to be considered separate? (ELC)

Response: Applicants for confined feeding approvals must specify the boundaries and limits of the requested approval through the application process. The guidance document will assist in this determination.

Comment: 327 IAC 16-2-5(1); Indiana should stay consistent with the threshold levels set by EPA at 1000 animal units instead of 300. (KJP) What is the reasoning of the control animal units over 600 with zero tolerance and those units under 600 have no restrictions? Is this fair and equitable? If large industries, municipalities, and others are not conforming to zero tolerance of dumping into our state's waters, why is the livestock industry being singled out? (GS)

Response: The level of animals regulated in Indiana is determined by statute in the definition of "confined feeding operation" at IC 13-11-2-40. Large industries and municipalities that discharge into waters of the state are regulated through the NPDES program in 327 IAC 5.

Comment: 327 IAC 16-2-6; The definition of "construction" should exclude or make exception for construction covered under IC 13-14-8-11.6, which provides that construction permits are not required in many situations where the discharger has a valid NPDES permit. (ELC)

Response: This definition is statutory in IC 13-11-2-40.8 and is specific to the Confined Feeding Control statute at IC 13-18-10.

Comment: 327 IAC 16-2-7; The addition of the words "any liquid or solid animal excreta or any used bedding, litter, or waste liquid" in place of manure seems extreme and unnecessary. (VLS) At the end of the definition, a statement should be added that reads ". . . in such a manner as to cause contamination of surface water, as defined for groundwater in IC 13-11-2-43." If it is going to be called "contaminated runoff', it should meet the definition of "contamination" which required the "presence in groundwater of at least one contaminant in a quantity or concentration that: (1) is injurious to human health, plant or animal life, or property; (2) interferes unreasonable with the enjoyment of life or property; or (3) otherwise violates: (A) environmental management laws; or (B) rules adopted under environmental

management laws." (IPPA) This definition should provide that liquids that remain with the manure are not runoff. The definition should clarify that precipitation which has come into contact with manure which has been properly applied to land is not contaminated runoff. (ELC)

Response: Removal of the words "any liquid or solid animal excreta or any used bedding, litter, or waste liquid" from the definition of "contaminated run-off" would be too restrictive since then all precipitation or surface water at the confined feeding operation would be "contaminated run-off" by definition.

IDEM does not believe it is appropriate to apply a statutory definition related to groundwater protection to surface water. Confined feeding operations are prohibited from discharging or spilling manure into surface waters. Any such discharge or spill that can be traced to a confined feeding operation is a violation.

Liquids that remain with the manure are, by definition, manure, and must be handled as such. The definition only addresses contaminated run-off at the confined feeding operation, not at a separate land application site. Precipitation at a land application site that does not leave the site would not be contaminated run-off. Precipitation that has come into contact with manure at a land application site and subsequently leaves the site may be a violation.

Comment: 327 IAC 16-2-9; The term "discharge" needs to contain a component related to stormwater related discharge. Please establish a design frequency above which a discharge may not be determined to be a violation. (BE) The rule uses the term "discharge" in a way that confuses the term with a "spill" of manure or contaminated runoff. This rule should either eliminate the term "spill" or limit its applicability to manure and contaminated runoff. With this change to "spill", it is suggested that all uses of the term "discharge", except 327 IAC 16-8-11, be changed to "spill" and that this definition of "discharge" be eliminated, as the remaining use of the term at 327 IAC 16-8-11 conforms to ordinary usage and should not require additional definition. (ELC)

Response: Any "discharge" from a confined feeding operation is a violation unless in accordance with a valid NPDES permit. Confined feeding operations without a valid NPDES permit cannot discharge except in the event of the 25-year, 24-hour storm for structures designed and constructed to withstand the 25-year, 24-hour storm.

IDEM believes the rule is clear that the term "spill" pertains to manure, which includes contaminated run-off and waste liquid. Any release of manure at a concentrated animal feeding operation (CAFO) is a "discharge" since all CAFOs are point sources (40 CFR 122.23(a)). In addition, any release of manure from a man-made device may cause a smaller confined feeding operation to be classified as a CAFO. IDEM does not believe a change to the rule is needed.

Comment: 327 IAC 16-2-12; It is not clear how a "feedlot" differs from pasture or a field. Also, it is not clear whether this definition includes the same provision as in 327 IAC 16-2-4(a)(2) regarding vegetative cover. Nor is it clear whether the term "animal confinement" means "confined feeding" in this usage; if so, the defined term "confined feeding" should be used. (ELC)

Response: The term "feedlot" used in this rule only applies to lots or pens at confined feeding operations, not pastures or fields. A feedlot is not dependent on vegetative cover for the purposes of this rule. The term "animal confinement" has been changed to "confined feeding" for clarification.

Comment: 327 IAC 16-2-13; "Run-off" should be "contaminated run-off." (ELC)

Response: The definition describes the general function of a filter strip. Use of this conservation practice cleanses "run-off", whether it be "contaminated run-off" as defined in 327 IAC 16-2-7, or "run-off" mixed with other substances which would be removed by a filter strip.

Comment: 327 IAC 16-2-14; For clarity and consistency, the definition of "flood plain" should define floodplain by reference to Federal law defining the term. (ELC)

Response: The current definition is specific to the flood plain boundary where certain restrictions apply in this rule. All restrictions from other state and federal agencies would not be impacted by this rule definition.

Comment: Elimination of the definition for "fowl" with the addition of "other animal feeding operation" has the effect of defining two applicability levels for ducks, one at 30,000 ducks in 327 IAC 16-2-5(1)(C), and the other at 5,000 ducks in 327 IAC 16-2-29(2). The dictionary definition of "fowl" also appears to include turkey and geese; it is not clear whether these should be considered under "confined feeding" of fowl at 327 IAC 16-2-5(1)(C) or under "other animal feeding operations" at 327 IAC 16-2-29(5). This definition should be reinstated and revised to clarify these matters.

(ELC)

Response: There are meant to be two action levels for ducks, which are based on the type of manure handling system being used. Turkeys and geese are considered fowl in this rule.

Comment: 327 IAC 16-2-16; "Run-off" here should be "contaminated run-off." (ELC)

Response: The definition describes the general function of a gradient barrier. Use of this structure diverts "run-off", whether it be "contaminated run-off" as defined in 327 IAC 16-2-7, or "run-off" mixed with other substances which would be diverted by a gradient barrier.

Comment: A definition of "ground water" should be included in the rule to clarify how farm drainage tiles are addressed. (JJA) (JJ) (SG) (IBCA) (IFB) (JDH) Farm drainage tiles should not be considered waters of the state and regulated by state water quality standards. (JJA) (JJ) (IFB) (JDH) If contaminated water is in a field tile and then makes its way to waters of the state at a level exceeding the accepted thresholds, then the law takes effect. If water is in the tile and does not make its way to a stream or other water body at a level below the threshold, there is no water quality violation. (SG) (IBCA)

Response: IDEM will add the following definition of "groundwater" from 327 IAC 2-1-9 Water Quality Standards, to the rule: "Groundwater means such accumulations of underground water, natural or artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this state, but excluding manmade underground storage or conveyance structures." Manure from a drainage tile that contaminates waters of the state is a violation.

Comment: 327 IAC 16-2-17; We recommend that this definition read as follows: "Highly erodible land" means land that has a high potential to erode based on site-specific characteristics, such as slope length and steepness, soil erodibility, and rainfall, as defined by the USDA-NRCS. (USDA) This definition should include by reference standard methods for determining whether land is highly erodible, or IDEM and owners will be in for endless argument. (ELC)

Response: A reference to "soil type" has been added to the definition. The guidance document will provide references to NRCS standards for classifying "highly erodible land".

Comment: 327 IAC 16-2-21; The use of the word "characteristic" in this definition lends itself to the ability to define areas that are not truly a karst area. Having a "characteristic" of a karst area does not make it a karst area. How will this broad definition be interpreted in the field by inspectors? (RAF-CE)

Response: Given the nature of karst terrain, IDEM prefers a broad definition of karst. Lists of features in the karst definition are intended as examples and not an exclusive or exhaustive list.

Comment: 327 IAC 16-2-22; Given the definitions of "manure" and "waste liquid" does this mean that rain water could possibly need to be applied at agronomic rates? Thereby requiring analysis before application? (RAF-CE) For clarity, add "used" in front of "litter" as well as in front of "bedding". Also, this definition is circular with the definition of "contaminated run-off." The reference to "contaminated runoff" should be removed from the definition of "manure' and the phrase "manure and contaminated runoff' substituted for "manure" at the appropriate locations in the rule text. (ELC)

Response: Rain water that has come into contact with manure is considered "contaminated run-off" and would need to be collected and applied at agronomic rates. Litter is considered to be poultry manure. IDEM believes contaminated run-off should be handled as manure.

Comment: 327 IAC 16-2-28; This definition is overly broad. The operating record for purposes of this rule should be limited to the records required by the rule. The rule should specify that the owner/operator need not create a separate record as the "operating record" required by the rule, but must keep the information. However, records unrelated to the purpose of the rule, such as the dairy cattle yields, should not be part of the "operating record" under this regulation. (ELC)

Response: The definition of "operating record" does not specify which records must be kept. The records that must be kept are listed in 327 IAC 16-9-5. The definition has been clarified by indicating that only records required by this article must be in the operating record. The owner/operator may chose to include other information in the operating

record, but it is not necessary for the purposes of this article. Further clarification is provided in the guidance document.

Comment: 327 IAC 16-2-29(5); The definition of "other animal feeding operation" appears to allow the Commissioner to extend the list of animal types affected by the rule without notice and comment. As the definition of "confined feeding operation" at 327 IAC 16-2-5(3) provides the Commissioner with sufficient authority to immediately apply the rule to remedy any ongoing water pollution problem, the lack of public notice and comment in this section cannot be justified. The language at (5) mentions only "other species of animals." The Commissioner should include both "other species and numbers of animals" in his determination. (ELC)

Response: Definitions in the rule do not impose requirements. The definition of "other animal feeding operation" describes the types of animals that are included in the article when a specific requirement for other animal feeding operations is described. Subdivision (5) covers any other animal species that are under the jurisdiction of this article. If a large operation that confines a species of animal not specifically mentioned in 327 IAC 16-2-5 or 327 IAC 16-2-29 proposes to locate in Indiana, the Commissioner may designate it as an "other animal feeding operation" that must apply for an approval and comply with this article. At that time, subdivision (5) provides the language under which the species at this specific operation is included in the rule. It is not IDEM's intent to bring all operations with a specific species not already included in 327 IAC 16-2-5 or 327 IAC 16-2-29 into the rule without proper public participation through another rulemaking process.

Comment: 327 IAC 16-2-30; The definition of "owner/operator" should not prevent the confined feeding owner from entering into a contract which allocates responsibilities with his contractors. (JJA) (JJ) (IFB) (JDH) The owner/operator situation needs to be addressed. The term could mean the facility owner, the lessee, hog owner, manure application landowner, manure applicator, and the builder. The responsibilities should be spelled out in contracts and the State should honor the responsibilities in the contracts. The State should not act like an ambulance chaser and sue all parties in the neighborhood. (CC) Joint liability is a concern. An error on a contractors part should not reflect on our home farm. (KSCH) An indemnification provision should be added for those with production, operational and other types of contracts. (IPPA) This definition is overly broad. Liability under this rule should be limited to persons who control the equipment, or an exception should be included so that lessors of waste management systems are not subject to liability for violations by lessees leasing waste management systems. (ELC) We strongly believe that integrators should be held jointly and severally liable for rule violations that may occur at facilities they have a financial relationship with. (CAC)

Response: The rule does not limit the owner or operator from entering into contracts. The owner and operator are ultimately responsible for any violations caused by a contracted manure spreading service, although legal action may also be taken against the contractor. The owner and operator would also remain responsible for any violations in design and construction at a confined feeding operation and any resulting leakage.

Any person who commits a water quality violation is responsible for the consequences regardless of the contractual relationship that applies. The rule specifies that the person responsible for the violation will be held accountable. However, a water quality violation is a violation of the approval for which the holder of the approval is responsible. This rule does not infringe on the private rights of a contract. However, the remedy lies in the contract, not State reallocation of liability.

Comment: 327 IAC 16-2-31; "Potentially available nitrogen" needs reference methods put into it. The term "usually calculated," raises significant questions in the absence of a defined methodology. Standard test methods for the various nitrogenous species should be specified. (ELC)

Response: The guidance document will make reference to Purdue publications regarding acceptable methodology for making this determination.

Comment: 327 IAC 16-2-32; It appears the definition of "public water supply surface water intake structure" is meant to refer to structures used to take water from surface water sources for the purpose of providing water through a public water system. It does not appear that the definition is intended to include water towers, underground piping, and other public water system supply structures. This needs to be clarified. (ELC)

Response: The definition is not intended to include water towers, underground piping and other public water supply structures unless a reasonable assessment indicates that manure could contaminate drinking water.

Comment: 327 IAC 16-2-33; The definition of "public water supply well" would be clearer if it referred directly to the definition of a "public water system" used in drinking water regulations (327 IAC 8-2-1(49)). The reference to "other purposes" is too broad and ambiguous, with considerable potential for misinterpretation, and should be removed in any case. (ELC)

Response: IDEM did not want the restriction to be misinterpreted to mean any structure other than the well itself.

Comment: 327 IAC 16-2-35; The use of the term or phrase "Aquifers used as a source of drinking water" could be interpreted in such a manner as to define possibly the entire state of Indiana. Under (5)(C), the "critical habitat of an endangered species" is again a very broad definition and should be better defined to include documented habitat that certifies actual sitings of endangered species not just the possible or critical habitat of an endangered species. Under (5)(D)(iii), what triggers the definition of "historic sites"? Does the finding of an arrowhead become an historic site? (RAF-CE) The definition of a "sensitive area" should be qualified by the addition of water quality to define a specific threat. Sensitive areas should be protected, but only when water quality issues are directly related to that area. (JJA) (JJ) (IBCA) (IFB) (JDH) (IPPA) (KSCH) We support protecting endangered species, parks, historical sites, etc., but your rules could impact us in ways as yet unknown. IDEM should be protecting sensitive areas as they relate to water quality issues only. Please add the word "water quality threats" to the defined language. (LH) (BE) (IPPA) (JA) In defining "sensitive areas" to be protected, IDEM has exceeded it's authority. IDEM should concern themselves with water quality issues only and not involve themselves with unrelated and undefined issues such as "historical sites". (APE) This should read: "'Sensitive area" means a site where conditions that pose a specific threat to one or more of the following:" (EGL) The phrase "a site where conditions exist that pose a specific threat" is vague. IDEM should identify what is protecting these sites against. (ELC) The specific definition of "wetlands" that is being used here should be cited or referenced, or appear in the definitions. IDEM should clarify that parks must be publically owned, so that adjacent woodlot owners are not suddenly the owners of "parks." (ELC)

Response: IDEM will insert the phrase "water quality" between "specific" and "threat" in 327 IAC 16-2-35. IDEM believes this definition provides the appropriate information required for protection of these areas. IDEM will carefully consider the site specific situation when making determinations regarding sensitive areas.

Comment: 327 IAC 16-2-36; The definition of "spill" is both overly broad and confusing. If "spill" is to include spills of manure and contaminated run-off, the definition should specifically state it. The rule should be limited to spills of manure and contaminated run-off. Certainly the term is used in this sense at 327 IAC 16-9-4(c)(3)(A). Spills of substances that appear in no other portion of this rule should not be included in this definition. They are not part of the management and permit systems covered by this rule. The definition of "spill" should read as follows:

> "'Spill' means any unexpected, unintended, abnormal, unapproved, or unpermitted dumping, leakage, drainage, seepage, discharge, or other loss of manure, contaminated runoff, or waste liquid. The term does not include releases to impermeable surfaces when the substance does not migrate off the surface or penetrate the surface and enter the soil."

If the coverage of non-manure spills is retained, it must be recognized that there is no definition of "objectionable substances" in this rule. The Indiana Spill Rule provides a possible definition: "an objectionable substance is a substance that is of a quantity and a type present for a duration and in a location so as to damage waters of the State." (ELC)

Response: The guidance document refers to the spill rule definition of objectionable substances for clarification.

Comment: 327 IAC 16-2-38; It is not clear why the location for staging is limited to the site where the manure will be land applied. Why should short term staging not be allowed in other manure management operations? (ELC)

Response: Accumulations of manure at locations other than the land application site is considered storage and would be subject to manure storage requirements in 327 IAC 16-8.

Comment: 327 IAC 16-2-40; The definition of "surface water" should be the same as used at 327 IAC 8-2-1(61). (ELC)

Response: IDEM believes the definition of "surface water" currently in the proposed rule is clearer and more appropriate for the purposes of this article.

Comment: 327 IAC 16-2-43; The definition of "waste liquid" should be amended. A broad interpretation of raw materials could be construed to include crops growing in the field. The rule must recognize that farming is a biological system and that some raw materials are always present in our fields. We do not believe the intent of the rule is that storm water run-off from fields should be handled as a waste liquid. The rule contains adequate language to require containment of contaminated runoff without this provision. (JJA) (JJ) (IFB) (JDH) Handling "waste liquid" as manure dramatically expands the requirements for land use and expense. "Waste liquids" must be captured, analyzed and applied at an agronomic rate. Who defines what contamination of the truck or trailer wash water is? At what level is it contaminated? What amount of precipitation does it take to contaminate the contact with any raw materials? How will the state permit the additional land required for this increase in application? Does this properly protect waters of the state? (RAF-CE) Strike subsection (8) in the waste liquid definition. (MHI) (TDB) (DHI) (RAT) (SHI) (JER) (JTAY) (MCY) (MMA) (JA) (LH) (BE) (EGL) (IPPA) (APE) (CMR) (SG) (IBCA) Does subsection (8) mean egg wash water, and milk house water, and rain falling on hay is now contaminated? (VLS) Raw material needs to include only materials involved in production activities and considered a threat to water quality. The term "raw material" would be best excluded as it is too general. (LAW) It is extremely unfair to lump together all of the (8) items listed under this definition as being handled as manure. The items such as egg wash water, milk house wash water, and precipitation need to be further defined. Egg wash water contains such a small amount of manure that it is possibly unable to be measured. And besides in this wash water are sanitizers that remove and kill bacteria. Would this wash water then be inert of it effect as related to manure? Is the milk house wash water what is used to spray down the parlor or is it the water used to sanitize the equipment? (RAF-CE)

Response: IDEM has deleted subdivision (8).

Comment: Add the words water quality threats to the defined language. (MHI) (TDB) (DHI) (RAT) (SHI) (JER) (JTAY) (MCY) (MMA)

Response: It is not clear to which provision this comment applies.

Comment: 327 IAC 16-2-45; The USDA-NRCS definition of "waste management system" includes waste utilization and nutrient management. (USDA)

Response: For the purposes of this rule, the "waste management system" does not include waste and nutrient utilization considerations and procedures.

Comment: 327 IAC 16-2-46; In the definition of "waters", is tile water included with underground water? Is it referred to as "waters of the state" or is it referenced anywhere other than "drainage inlet"? (USDA) There needs to be an exclusion for tiles, and it would make sense to use the 327 IAC 2-1-9 definition covering waters of the state and surface waters. (VLS) This definition should also contain the exclusions contained in IC 13-11-2-265; otherwise, this definition may be interpreted to include water within wastewater treatment systems. (ELC)

Response: The definition of "waters" is statutory and does include the exclusions in IC 13-11-2-265. Since the definition of "waters" includes ground water, setback distances are to be measured from "surface waters" which will address the setback issues from drainage tiles.

Comment: 327 IAC 16-3; We encourage IDEM to secure additional state and federal grant monies to help particularly "other animal feeding operations" to obtain the material ability to comply with the regulations. (IPPA)

Response: Rules are only a portion of the overall agency program relative to confined feeding operations. IDEM has also established a grant program to provide financial assistance and other state and federal programs may also be available to provide some financial and technical assistance.

Comment: The performance standards state that "Operations must be conducted in a manner that minimizes nonpoint source pollution." "Minimize" is not defined. (JTAR)

Response: The guidance document will contain suggestions on minimizing nonpoint source pollution.

Comment: 327 IAC 16-3-1; The term "unpermitted discharge" should be replaced with "spill" if the recommended changes to the definition of "spill" are adopted. (ELC)

Response: The term "unpermitted discharge" is more direct in regards to the impact on the environment. This is important in considering the consequences of an unpermitted discharge compared to a spill which may not impact waters

of the state.

Comment: 327 IAC 16-3-1(e); This language does not give an allowance for an unforeseen or unusual weather event. A suggestion would be to add an "act of God" clause to allow some flexibility in situations that are completely beyond the control of a conscientious producer when he has handled the manure in the best possible fashion. (IFB)

Response: Unforeseen or unusual weather events are always considered during an investigation of a spill or discharge.

Comment: 327 IAC 16-4-3; The additional conditions for large confined feeding operations is not appropriate and has an unintended focus on the layer industry. This rule should not focus on the layer industry, but on the environmental potential risk. Allowances should be made for facilities that handle dry manure, excluding them from the conditions of 327 IAC 16-4-3. (CBR) Why have one standard for one group and another standard for another group? This is called discrimination. If anyone wants to get serious, how much money do you want to spend in court to defend this? (AGRI) Additional requirements for "large" operations are arbitrary and capricious. The proposed rule already gives the commissioner the authority to require producers to fulfill additional requirements if deemed necessary. (ISPA) This section exceeds IDEM's statutory authority, and lacks a scientific basis for imposing additional standards based on size. (IPPA)

Response: This provision is in recognition of the fact that if a spill or discharge occurs at a large operation, it could be more severe than a similar problem at a smaller operation that has less manure on site. A larger operation is likely to have a potential impact on a greater number of people and therefore, it makes sense to provide opportunity for those people to express their thoughts and concerns prior to approval. The size cutoff for this section currently represents the top 1%, based on size, of approved CFO sites in Indiana. The notice requirements in 327 IAC 16-7-12 are statutory and must be followed by all new confined feeding operations, regardless of size or species, that propose to construct in undeveloped land.

Comment: 327 IAC 16-4-3(c)(5) and (6); This is excessively broad authority and should be deleted or limited. Such limits might require that the Commissioner show that such desired requirements, and any associated monitoring or other measurements, are both cost-effective and technologically feasible in the proposed situation, and will not cause detriment to other environmental media, consume excessive energy, create excessive amounts of wastes or byproducts, or have other undesirable non-pollution impacts. (ELC)

Response: It would be unfair to producers to limit the options available to address problems at their facility. The Commissioner needs to be able to consider various appropriate methods to protect human health and the environment in order to be sure that the best option is chosen for the environment and the producer.

Comment: The rule does not meet the requirements for state NPDES enforcement authority as established in 40 CFR 123.27. Specifically, Rule 4, section 4, would inappropriately limit Indiana's authority to enforce compliance by CAFOs with any program requirement or permit condition. If Rule 4, section 4, appears in Article 16 when submitted to USEPA as a proposed general NPDES permit, and it would apply to CAFOs, then we will object under 40 CFR 123.44. (If Indiana ultimately submits Article 16 to the USEPA as a proposed revision to the Indiana NPDES program, and Rule 4, section 4, would apply to CAFOs, then we will disapprove under 40 CFR 123.62.) Rule 4, section 4, needs to be deleted from Article 16 or revised to clarify that it does not apply to CAFOs. (USEPA)

Response: The language has been changed to reflect that certain violations "may" be subject to an enforcement action rather than "will" be subject to enforcement. IDEM will continue to work with EPA outside this rulemaking to address NPDES issues for those producers designated as federal CAFOs.

Comment: By taking a "one size fits all" approach to rulemaking, IDEM has ignored some important differences that exist between large and small farms. Large CAFOs have a greater potential for harm and can afford to implement stricter standards. The rule approach favors large operations because it forces smaller operations to spend a higher percentage of its profits to comply. It makes no sense to regulate a massive multi-million dollar industry, like a 10,000 hog CAFO, that produces as much waste as a city of 30,000 people under the same guidelines as a family farm with only 600 hogs. IDEM should propose more stringent, mandatory requirements on CAFOs with 2,000 or more hogs. The more stringent regulations should comparably apply to CAFOs with cattle, poultry, etc. IDEM should similarly bring CAFOs with 2,000 or more hogs (and comparable waste producing numbers of poultry, cattle, etc.) under the same public

notice/hearing guidelines that currently only govern CAFOs with 12,000 or more hogs. (CAC)

Response: IDEM's responsibility is to protect the environment, while treating all the regulated community in an equitable manner. This is not a 'one size fits all' rulemaking - the rule contains provisions that allow a producer to opt for an alternative approach on most requirements.

Comment: 327 IAC 16-6-1(b); There is a great deal of concern that producers will not be able to get up to speed in time. It will take time for the various farm and commodity organizations to reach their membership with educational programs. It would be helpful to give the producers at least one year after the effective date of the rule. (VLS) We need another year or two in order to get our records up to date and to give time to take samples at the right time frame to match our crop rotation plan. (EGL) The time frames need to be adjusted to July 1, 2002, giving us time to find a company to test samples, take the samples, send them off, and then have an appropriate time frame to match our crop rotation plans. (MHI) (TDB) (DHI) (RAT) (JA) (SHI) (JER) (JER-2) (JTAY) (MCY) (IPPA) (MMA) (DLO) (BE) (APE) (JUA) (CMR) A minimum of one year after the effective date of the rule should be allowed to educate producers and allow them the time needed to bring their record keeping requirements into compliance with the new rule. (JJA) (JJ) (JDH) (IFB) The timetable is too aggressive in allowing farms to comply with the new rules. Please consider making the effective date mid 2002. (MLE) There should be at least a six month education period for producers. (KSCH)

Response: It is IDEM's intent to provide adequate time for compliance for all confined feeding operations. After a rule is final adopted by the Water Pollution Control Board, the rule must go through an approval process, which normally takes at least three months. The rules are generally effective thirty days after filing with the secretary of state. Therefore, the rules will not be effective until at least three months after the Water Pollution Control Board adopts them as final. IDEM has included many organizations from the beginning of the rule development process in January 1998 to get their input as well as to allow organizations like IPPA, NRCS, Purdue, etc., to work on education and outreach for their constituents as early as possible. A compliance schedule has been provided in the rule for certain new requirements. Language has been added to indicate that compliance with the emergency spill response plan requirements in 327 IAC 16-9-4 shall be within ninety (90) days of the effective date of the rule. Due to the schedule of this rulemaking, the dates in 327 IAC 16-6-1(d) and (e) have been changed to January 1, 2002 for existing operations.

Comment: 327 IAC 16-6-1(b)(2) and (d); It is not clear from the rule whether IDEM has any approval, disapproval, or veto authority over the manure management plan. (ELC)

Response: The department determines whether a manure management plan complies with the requirements in the regulations. There is no formal approval or disapproval process for the manure management plan.

Comment: 327 IAC 16-6-1(c); This rule should not require advance approval to increase the size of feeding operations without construction. Such approval modifications will be administratively burdensome. In addition, this may stifle the growth and flexibility of Indiana confined feeding operations. All such expansions should fall under the notification provisions at 327 IAC 16-7-5(b), with a proviso that the agency may object to the expansion within a defined time period. (ELC)

Response: An increase in the size of the feeding operation will increase the volume of manure generated. IDEM needs to evaluate the increase to determine if any modifications to the approval are needed to address the increased amount of manure. IDEM believes that the provisions in 327 IAC 16-6-1(c) do allow a reasonable amount of growth without triggering a modification, and that increases of the magnitude that will require a modification have the potential to generate a significant amount of manure.

Comment: 327 IAC 16-6-1(e)(2); If IDEM moves from a nitrogen base for agronomic rate application to a phosphorous base, then the staff at Purdue University and NRCS should have input into how this level is established. Also, the time line to accomplish the transition from nitrogen to phosphorous needs to reflect consideration for the producer, such as a four or five year phase-in program. (CBR)

Response: Any such rule change would require a rule revision with additional public input and development of a timeframe for implementation as part of any public discussion. However, the rule allows for the inclusion of a phosphorous standard in specific situations where a phosphorous problem exists.

Comment: We would like clarification with regard to Indiana's intended use of Article 16, Rule 7, sections

2(c)(2) and 5(a)(2). Under section 5(a)(2), we would like information on the method Indiana intends to use to determine whether phosphorous in soils represents a water quality threat. In responding to this request, it would be helpful if the Department included information which compares and contrasts its methods (including the circumstances under which the method would be employed) with Title 190, Part 402 (Nutrient Management), of the General Manual and the National Handbook of Conservation Practices, Conservation Practice Standard 590, as published by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), on April 19, 1999 (64 Federal Register 19122). We understand that the Indiana office of the USDA-NRCS is in the process of revising its 590 Standard, and expects to complete the revision by the end of this year. Under sections (2)(c)(2) and 5(a)(2), we would like to know when and how the Department intends to exercise its authority to protect or restore surface water quality by:

1. prohibiting the application of manure to land, or basing land application on the phosphorous requirements of crops, when fields deliver rainfall or snowmelt runoff to surface water and the Department determines that phosphorous in the soils is a risk to surface water quality,
2. requiring residue protection of crop cover or a conservation plan for lands that are not highly erodible but, nonetheless, deliver rainfall or snowmelt runoff to surface water, and
3. prohibiting the application of manure to land when the land is saturated with water or when rainfall, which may produce runoff, is forecast within 24 hours after the planned application.

(USEPA)

Response: The provision at 327 IAC 16-7-2(c)(2) has been deleted from the proposed rule. In 327 IAC 16-7-5(a)(2), identification of concerns with phosphorous may occur based on information obtained in a variety of ways, including routine assessments from our Office of Water Quality or any other source which identifies a potential problem.

Comment: Phosphorous levels should be according to crop plan. (DLO) The new rules are unreasonable in relation to phosphorous. (AGRI) The phosphorous standard is too low to apply no manure. Why should farmers take all the blame for too much phosphorous on the ground? (CMR) IDEM needs to promulgate an agronomic phosphorous standard before these rules are enacted. (CAC) The rule should limit the amount of manure that can be applied to cropland to minimize phosphorous runoff into streams and lakes. (BBAN) (MAM) (SWT) (STD) (TRK) (RHI) (PLCC) (JKE) (FDH) (DCU) (JSW)

Response: IDEM recognizes nitrogen as being the element of greatest concern when it comes to determining the limiting factor for application rates. High nitrates in groundwater are known to cause health problems for infants and the elderly. Nitrogen is mobile in the soil and can leach into underlying aquifers if not utilized by crops.

Agronomic rates are considered to be rates of application based on the nutrient content of the manure, the fertility level of the soil, and the nutrient needs of the proposed or existing crop and which do not exceed the nitrogen demand of the crop. Phosphorous has been identified as having a potential maximum range within the soil before it also becomes mobile and lost via leaching. Extensive research is being conducted by academia and IDEM will be informed when a consensus of recommendations relative to phosphorous limits are formulated. The proposed rule provides a mechanism to recognize phosphorous as a limiting factor in the future if necessary. Additional information about phosphorous soil parameters will be addressed in guidance.

Comment: 327 IAC 16-7-2; Flexibility must be insured in this area. IDEM must be willing to say an application was properly approved under their judgement factor if they don't have a specific concern with a rigid number formula. (IPPA)

Response: IDEM does not understand the reference to "a rigid number formula". If an application satisfies the requirements of the rule, then an approval will be issued. Flexibility is allowed throughout the rule, except for performance standards.

Comment: 327 IAC 16-7-2(b)(1); Should it be "or" instead of "on"? (USDA)

Response: "On" is the correct term. The application form required by this subsection is to be on forms that will be provided by the department.

Comment: 327 IAC 16-7-2(b)(5); We recommend this be changed to read as follows: "Soil and water table information from test holes that are at least two (2) feet below the planned bottom elevation of a concrete pit and at least five (5) feet below the base of all other proposed liquid manure storage structures . . . Indiana." (USDA) This section has

test holes being "conducted" by a certified person, but doesn't say who should derive the data. It might be better expressed as:

"Soil and water table information derived from a program of test borings (holes?) designed and conducted by (a certified person). These borings (holes?) shall extend at least five (5) feet below the base of the proposed liquid manure storage structure, and shall be sufficient in number to adequately characterize the water table and soil."

This is an example of a measurement requirement that is left open to disagreement between IDEM and the operator due to lack of references to standard methodologies. (ELC)

Response: IDEM has changed the requirement to reflect test holes of two (2) feet below the structure for a concrete liquid manure storage structure and five (5) feet below an earthen liquid manure storage structure. No change has been made regarding the certified person required to conduct the tests, or the methodologies to be used.

Comment: 327 IAC 16-7-2(c); This might be clearer if it said: "The commissioner may deny an approval application, or place conditions on an approval in addition to the requirements of this regulation, for the following: . . . " (ELC)

Response: IDEM has changed this section for clarification.

Comment: 327 IAC 16-7-2(c)(2); Use of the term "discharge" in this section should be replaced with the term "spill", especially if the suggested changes to the definition of "spill" are adopted. (ELC)

Response: This subdivision has been changed for clarification. IDEM does not believe the definition of "spill" needs to be changed.

Comment: 327 IAC 16-7-2(d); This should read: "The commissioner shall provide written documentation of the basis for denial of the application or placement of additional conditions on the approval." (ELC)

Response: IDEM concurs and has made the change.

Comment: 327 IAC 16-7-3; Under this section the agriculture community of Indiana has been led to believe that their renewal period is for five (5) years, but it states that an approval shall be issued for a fixed term not to exceed five (5) years. The circumstances under which an approval may be for less than five (5) years are not defined and neither is any guidance given to the commissioner for this clause. Why is this? What are the "appropriate circumstances"? What steps are outlined to the commissioner to issue modifications of a permit? What happens to the operation during a permit being modified, revoked or terminated? (RAF-CE) The approval period for Confined Feeding Operations should be ten (10) years, and any new renewal approval last for a period of ten (10) years. 327 IAC 16-7-3 should be modified to read as follows:

"Sec. 3(a) An approval shall be issued for a fixed term not to exceed ~~five (5)~~ **ten (10)** years. ~~Approvals of less than five (5) years may be issued in appropriate circumstances at the discretion of the commissioner.~~"

* * *

In no event may the term of an approval be extended beyond ~~five (5)~~ **ten (10)** years from its original effective date by modifications, extension, or other means except as provided in subsection (b)."

(BTH)

Response: The rule has been revised to clarify that renewals will be automatic for a five (5) year period unless a discharge has occurred. A site that has had a discharge may need to be reevaluated in less than five (5) years to assure the conditions that caused the discharge have been adequately corrected.

Comment: 327 IAC 16-7-3(b) and 4(a); These provisions appear to conflict in that the application for renewal is not due until immediately prior to expiration of the approval, but the old approval is automatically extended if IDEM fails to renew, after receipt of an application and prior to approval expiration. It would be a good idea to move the renewal application due date to 3 months prior to expiration of the approval. (ELC)

Response: This section has been modified to clarify the function of a renewal application.

Comment: The rule should provide for a preliminary review of applications and a determination of "sufficiency." Such a determination should be limited to a finding that the application addresses all required matters, and should not imply any IDEM commitment regarding its content. In order to reduce the number of letters IDEM must issue, the rule should also provide that an application is considered "sufficient" automatically if IDEM does not declare it "insufficient"

within a defined time period such as 30 to 60 days after receipt. (ELC)

Response: As a matter of policy, staff does conduct a completeness review within 30 days of receipt. It is not clear why an automatic "sufficiency" determination would reduce the number of letters issued by IDEM. It is important that it be clear to the producer and IDEM on what date the application is determined to be sufficient to meet the ninety (90) day review requirement in IC 13-18-10-2.1(a)(1).

Comment: 327 IAC 16-7-4; The approval renewals should be established at five (5) years, not for a term "not to exceed five (5) years." (ISPA) Why waste a producer's time and money on renewals every 5 years if there has been no significant change in the operation? I also completely disagree with the possibility of holding a public hearing at this time if there has been no major environmental impact on the community well water contamination. (BET) There should be rules that a producer has to follow and if these rules and procedures are followed with no violations, the renewal should be automatic without a public hearing. (JER-2) 327 IAC 16-7-4; Under this section and with the general definitions used for the waste liquid, almost every producer in the state will have a discharge that would be "subject to" an enforcement action. Given this broad requirement and definition how will the state deal with the enormous number of public hearings and subsequent litigation resulting from this language? (RAF-CE) The renewal term should be a fixed term of ten (10) years and the proposed rule, 327 IAC 16-7-4, should be modified as follows:

> "Sec. 4. (a) An application for the renewal of a confined feeding operation or other animal feeding operation approval must be submitted to the commissioner prior to the expiration of the previous approval and concurrent with the requirement in IC 13-18-10-2.3 to submit a manure management plan at least one (1) time every ~~five (5)~~ **ten (10)** years. Approval renewals shall be issued for a fixed term ~~not to exceed five (5)~~ **of ten (10)** years. A confined feeding operation or other animal feeding operation that has had a discharge within the previous ~~five (5)~~ **ten (10)** years that was, or is subject to an enforcement action by the department pursuant to IC 13-30-3 shall be subject to public notice requirements in IC 4-21.5 upon receipt of a complete renewal application by the department. A confined feeding operation or other animal feeding operation that has not had a discharge within the previous ~~five (5)~~ **ten (10)** years that was, or is subject to an enforcement action by the department pursuant to IC 13-30-3 shall be considered to have a new approval renewal upon receipt of a complete renewal application by the department."

(BTH)

Response: As defined in IC 13-11-2-157, a "permit" includes approvals for confined feeding operations as an "other type of authorization required before construction or operation". This applies to all pollution control laws defined in IC 13-11-2-165, including IC 13-18-10. According to IC 13-15-3-2(a), a permit may be issued for any period determined by the department, but not to exceed five years. In accordance with IC 13-15-5-1(a), IDEM may publish a notice requesting comments concerning the issuance or denial of the permit. In addition, under (d), the commissioner, in response to a written request, may hold a public hearing in the geographical area affected by the proposed permit on the question of whether to issue or deny the permit.

It is not anticipated that renewals will be for less than five years except in situations where there have been major water quality violations that have not been resolved, and during the initial effort to establish the renewal cycle for all the confined feeding operations on a reasonable schedule for administrative purposes.

Comment: 327 IAC 16-7-4(a); A more appropriate approach would be to use the term "fully adjudicated" instead of "subject to an enforcement action". (CBR) (KJP) (ISPA) The wording should be changed from "enforcement action" to "water quality violation outlined by an agreed order or Commissioner's order after final judicial review". (PFI)

Response: Whether an action is adjudicated is not necessarily related to the severity of the violation. Severe violations could be settled outside of adjudication, therefore adjudication does not bear on whether there is a public hearing. Agency decisions are appealable under IC 4-21.5.

Comment: 327 IAC 16-7-4(a) and 327 IAC 16-7-13; The term "discharge" as used in these sections should not include discharges in accordance with NPDES and other permits which regulate such discharges. For clarity, the term "discharge" should be changed to "spill," with adoption of the recommended changes to the definition of the term "spill." If the definition of "spill" and "discharge" are not changed, this section must further provide that proper operation of a constructed wetland under 327 IAC 16-8-11(b) does not subject the owner to a public notice requirement under the requirements of 326 IAC 16-7-13 for owners who have had "discharges." (ELC)

Response: Discharges in accordance with a NPDES permit are not subject to enforcement as a discharge. Public comment periods and hearings are conducted prior to the operation of the structure or process to be used. The requirements of 327 IAC 16-7-13 do not apply to an existing "constructed wetland" that is properly operated.

Comment: The greatest concern is that a producer may be subject to a public hearing every 5 years. A producer cannot afford the risk of being shut down after having a building up for only five years. Public comment should be limited to environmental issues as they deal with water quality. IDEM should not, and does not, have the authority to call a public hearing because a couple of neighbors had a conflict over something that has nothing to do with water quality. (REW) The five-year renewal of a Confined Feeding permit will cause lending institutions to be more hesitant to make facility loans to farmers wanting to expand. (MLE) There is no financial entity, bank or otherwise that will lend anyone, in any form of agricultural production, money to build anything of value if you have this restriction. If you approve this as proposed, you have eliminated any future growth in any form of agricultural production in the State of Indiana. (AGRI) (JER-2) What is going to happen to the buildings full of livestock and also the financial livelihood of the farmer and his family if a renewal application is disapproved? What long term effects will this render on his ability to borrow money in the future if this disapproval stays on his record indefinitely? (BET) Five year renewals would cause bankers to back off of financing a new operation. (EGL) (JUA) (JA)

Response: Water quality concerns are only one issue that may be appropriate for a public hearing. Other issues involving compliance with this rule or underlying law such as improper notice of application, a deficient application, or a potential threat to a sensitive area as defined in 327 IAC 16-2-35 may also trigger an interest in a public hearing. Specific examples of instances in which a hearing would not be called will be included in guidance.

IDEM presently issues approvals to confined feeding operations which are required to submit a manure management plan every five years in order to maintain a valid approval. This is a form of renewal and has not been shown to have an impact on agricultural lending practices. The proposed rule changes do not require a large change from this existing condition. IDEM currently issues five-year renewals to a large number of industrial businesses that have large capital investments. The five-year renewals have not been shown to have a noticeable impact on loaning practices.

Within U.S. EPA Region V, Illinois, Minnesota, and Wisconsin have had five-year renewal permits in place. None of these states have experienced a change in agricultural lending practices based on a five-year renewal requirement. Since IDEM's proposed requirements for renewal are equivalent or less burdensome compared to these states, IDEM does not expect a change in lending practices in Indiana. IDEM discussed agricultural banking practices with the Indiana Banking Association in relation to the fiscal impact and a five-year permit. IDEM performed a lenders survey of a portion of the members at their National Conference. Based on follow-up discussions with the agricultural bankers and discussions with agricultural economic specialists, and based on the results of the survey, IDEM did not find evidence that a five-year renewal for sites that have a good compliance history, would create a noticeable change in Indiana agricultural banking practices. IDEM will continue to discuss banking issues to determine whether any revision to the fiscal analysis is needed. IDEM will also review the timing of the requirement to submit a renewal application.

Comment: Modifications, closure, temporary shutdown and exiting procedures need to be done with IDEM. (MHI) (TDB) (DHI) (RAT) (SHI) (JER) (JTAY) (MCY) (MMA)

Response: IDEM does not understand the comment.

Comment: Why do I have to get additional approval if I change the scope of my operation? If I have the required acres, have a manure management plan, and test my soil and my manure and haul where it is acceptable, should this not be sufficient? (REW)

Response: The approval is to determine that the requirements are being met. If so, there would be no problems issuing the approval.

Comment: 327 IAC 16-7-6; Under section 6, item (2), it states that the commissioner may revoke an approval or a condition of an approval as a result of a violation of rules adopted under the water pollution control laws. Does this not open the door for future regulatory efforts being adopted into an already existing rule? (RAF-CE)

Response: Future regulatory efforts must be done in accordance with statutorily required rulemaking procedures, the same procedures being used for this rulemaking.

Comment: 327 IAC 16-7-6(a); This provides no credible threat of enforcement. Absent the word "shall" covering the 16-7-6(a)(1) condition, there no expectation of enforcement. (SLOE)

Response: The commissioner must have the discretion to determine whether a specific violation is significant enough to justify a revocation or modification of an approval.

Comment: Testing of land and of manure should be on a regular basis, not once in 5 years. (JSTR)

Response: Then manure management plan must be submitted once every 5 years, but testing is required every 3 years.

Comment: 327 IAC 16-7-11; This section should contain references to approved methods for soil and manure testing. (ELC)

Response: Such methods will be covered in the guidance document which provides greater flexibility in adding new methods as they are developed.

Comment: 327 IAC 16-7-13; Please do not open the public hearings to everyone. Public input should be limited to environmental issues as they deal with water quality. Do not add other issues (odor, property valuation, nuisance, etc.) or you will be listening to the craziest stories you never wanted to hear about and it will be a waste of your time and mine. (MHI) (TDB) (DHI) (RAT) (SHI) (JER) (JTAY) (MCY) (MMA) There is some concern that this period will be used by people who have no scientific basis to make claims of concern, or their concerns are not based on water quality. (VLS) (KSCH) When you open it up to a public hearing, emotions take over and you will have neighbors fighting neighbors. (JER-2) When you have to have a public meeting, you will have a lot of time away from the operation preparing for the meeting besides having to hire an attorney. (EGL) The rule now reads that IDEM can hold a public hearing where there is significant public interest. This is beyond your jurisdiction and could potentially draw operations into difficulties in approval renewals every five years. It should read where there is significant public interest related to water quality issues. Public input should be limited to environmental issues as they deal with water quality (odor, property valuation, nuisance, etc.) is not within IDEM's authority and the public should not be misled that IDEM will address these issues. (LH) (BE) (APE) (CMR) This section exceeds IDEM's statutory authority and should be deleted. (IPPA) Public input should be limited to environmental issues as they deal with water quality only. There is a concern if an operation has had a discharge within the previous five years, they may be subject to public noticing requirements. (JA) I believe IDEM's requirements for public hearings do not just apply to water quality issues. I believe IDEM should specify certain issues such as human health, air quality, and property values, which also merit a public forum if requested. (CAC) It is a problem for the producer if some neighbors make complaints and then IDEM had a meeting because of the complaints. It costs the producer money to hire a lawyer and it is mentally and physically stressful. (MOF)

Response: The department has a significant amount of experience holding public hearings and separating technical issues from those over which the department has no jurisdiction. IDEM only considers comments and testimony that are applicable to the laws and regulations that it can enforce. A public hearing is not a legal proceeding, it is a forum for hearing public input. It is not necessary to hire an attorney for a public hearing.

Comment: 327 IAC 16-7-13(a)(1)(B); Following "discharge", IDEM needs to again clarify these are discharges "that do not meet the criteria outlined in 327 IAC 16-4-4." (IPPA)

Response: Any discharge that is not in accordance with a NPDES permit is subject to enforcement.

Comment: 327 IAC 16-7-13(b); This should be changed to read, "After the application has been received, reviewed and approved, the department . . . ". (IPPA)

Response: In order to initiate the public comment process and complete consideration of public input within 90 day review requirement for confined feeding operation approvals, it is necessary that the application be public noticed from receipt.

Comment: 327 IAC 16-7-13(c); IDEM needs to elucidate in the last sentence that these decisions are made "consistent with this article and federal and state environmental water quality laws". (IPPA)

Response: IDEM is responsible for protecting public health and the environment and enforcing appropriate environmental laws that do so. If a decision is not consistent with appropriate federal and state laws, it is subject to appeal and a hearing on the issue.

Comment: 327 IAC 16-7-13(d); The significant public interest needs to be confined to the "environmental water quality aspects fo the approval application". IDEM must not conduct hearings nor hearing testimony that will not help them make decisions regarding their authority over the environmental water quality impact of an CFO. (IPPA) When the State has a hearing, the exact parameters of what is being discussed should be published. This will prevent wasted time on items you have not jurisdiction over. This will also not make a stage for people with causes that have nothing to do with the hearing. (CC) What rationale will IDEM use to call a public hearing? (JUA)

Response: IDEM is a public agency and is always open to listening to concerns expressed by citizens. In making regulatory decisions, IDEM bases decisions on the applicable rules and laws; language has been added to this subsection to clarify this. As each case is unique, it is difficult to define specific parameters that trigger a public hearing.

Comment: We believe that county commissioners should be consulted to determine whether a public hearing is required as a result of issues raised during the comment period and not solely on the issue of the size of the operation alone. (JJA) (JJ) (IFB) (JDH)

Response: In accordance with 327 IAC 16-7-13(b)(3), the department must notify "local officials in accordance with IC 13-15-3-1" which includes the county executive of a county affected by the permit application. IDEM will consider any input from county commissioners, other county representatives, and any other commentors in making a determination on whether a public hearing is required.

Comment: The rule language concerning public comment periods and hearings should be modified to add water quality as the defining point of concern which triggers IDEM to hold public hearings on a confined feeding approval application. Public hearings should only be held when unanswered water quality issues remain. (JJA) (JJ) (DLO) (IFB) (JDH) In the section on Public Comment Periods and Hearings, the term "environmental concerns" needs to be clarified to be related to water quality. (SG) (IBCA)

Response: Water quality concerns are only one issue that may be appropriate for a public hearing. Other issues involving compliance with this rule or underlying law such as improper notice of application, a deficient application, or a potential threat to a sensitive area as defined in 327 IAC 16-2-35 may also trigger an interest in a public hearing.

Comment: There should be no new construction of any new CAFOs until the health problems associated with breathing fumes from large quantities of manure are adequately dealt with. (POW)

Response: The proposed rule does not directly address air quality issues.

Comment: Confined animal feeding operations should not be allowed to build in sensitive geology such as areas with caves, sinkholes or sandy soils. (BBAN) (MAM) (SWT) (STD) (TRK) (RHI) (PLCC) (JKE) (FDH) (DCU) (JSW) Large animal feeding operations should not be allowed in floodplains that will contaminate surface water during floods as has happened in South Carolina. (STD) IDEM should prohibit new confined feeding operations from locating in floodplains and sensitive geology such as areas with sinkholes or shallow aquifers. (HEC) (SLOE)

Response: IDEM is aware of the environmental concerns with construction in karst and flood plain areas and the proposed rule requires additional safeguards for such areas to assure adequate protection.

Comment: Measures must be taken to physically prevent the impending lagoon failures from destroying the creeks, streams, and rivers of Indiana. (JSW) Allowing potentially dangerous pathogens into the waters in these gross amounts should be stopped immediately. (POW)

Response: A major focus of this rule is assuring the lagoons are sited, constructed and operated in a manner to prevent contamination.

Comment: 327 IAC 16-8-1(c); This requirement may be more restrictive than municipal wastewater treatment plants. We have no problem that the waste management system should not be flooded in a 100-year storm event, but they should be able to be built in the flood fringe areas, with the proper IDNR permit. (BE)

Response: If flood fringe refers to floodway, construction in such areas is not allowed as the floodway contains active movement of water which can easily erode and destroy the berms of an impoundment.

Comment: Keep setbacks in place as of the 1998 rules. (GS)
Response: Setbacks for the construction of Confined Feeding Operations are the same as those used in the CFO guidance that was updated in December 1997.

Comment: 327 IAC 16-8-2; Given the definition of "waters" as the "accumulation of water, surface and underground, natural and artificial, public and private", how can any operation follow the setback of 300 feet from surface waters during a rain event on a farm? When the rain falls and accumulates would that not be natural accumulation on the surface? (RAF-CE)
Response: The definitions of "waters" and "surface waters" are not the same. Setbacks from surface waters would not be affected by temporary ponding of rain water.

Comment: 327 IAC 16-8-2; The setbacks were adjusted based on a liquid manure system and not dry manure facilities. Rather than having to demonstrate need with every application to get a variance from the setbacks, the rule should differentiate between liquid and dry manure facilities and utilize the current AW-1 guidelines for dry manure facilities and the new criteria for liquid manure facilities. (CBR) (ISPA) There should be different setbacks for dry and liquid manure handling because dry manure does not move. Expanding the dry manure production setback from 100 to 300 feet reduces the number of sites available for poultry production. (WVP) (PSH) (ISPA) Dry manure facility setbacks should remain at the 100 feet as required by present regulations. (PSH) (LAW)
Response: IDEM has provided flexibility in 327 IAC 16-5 for alternate design or compliance approaches and innovative technology that may be used to replace a requirement in the rule. In addition, a reduced setback for solid manure storage structures of 100 feet has been added in 327 IAC 16-8-2(b). This setback (100 foot) is the same as in the current AW-1 Guidance Document.

Comment: Many areas of southern Indiana are not suitable for confined feeding operations. The soils and the geology are not conducive to the disposal of the massive amounts of animal waste that are produced by confined feeding operations. A landowner should get strictly regulated permits to build a septic system and animal feedlot operators should be forced to the same standards. (POW)
Response: Under 327 IAC 16-4-2 and 327 IAC 16-4-3, the rule provides requirements for obtaining an approval for an operation and the construction of a waste management system. IDEM believes these requirements are sufficient.

Comment: Holding ponds or lagoons should not be constructed. (POW) There should be no lagoons permitted in the future. (GS)
Response: The rule includes specific requirements in 327 IAC 16-8-7 for the construction of earthen manure storage structures. This section also allows for additional requirements as necessary to protect the environment. IDEM believes these requirements are sufficient.

Comment: In response to a comment on size of manure storage structures, IDEM responded "Manure storage structure size does not equate to environmental protection". I find it hard to believe that IDEM considers a 10-acre lagoon placed on a sandy ridge overlooking a stream, no different a threat to the environment than a 10 by 20-foot structure in the same place. (JTAR)
Response: IDEM has certain design and construction requirements for all waste management systems, regardless of size in the rule. The guidance document provides additional information (including NRCS standards) about the criteria IDEM will use to approve designs. Under 327 IAC 16-4-3(c) the Commissioner has the ability to require additional design standards where it is determined to protect human health or the environment.

Comment: Go back to the 1998 building rules for pits. Require pits to have storage of 240 days. (GS)
Response: IDEM believes that 180 days storage is adequate.

Comment: 327 IAC 16-8-3(c); I desire a very detailed response to the comment in 327 IAC 16-8-3(c). If there is a determination of need that fits "determined to be necessary to protect human health", detail the conditions under which the commissioner would exercise the "may" discretion and not do any of the 5 points. 327 IAC 16-8-3(c) is clearly a place for the word "shall" rather than "may". Specifically, when is "necessary to protect human health" a mere option? Is

it when CFO industry might not make as much money as it expected to make? (SLOE)

Response: The use of the word "may" gives the Commissioner the discretion to consider site-specific situations prior to making a decision regarding an approval. While the Commissioner may determine that additional design standards would be necessary to protect human health in the proposed application, other information in the application process could indicate that even greater protection of human health (and potentially less cost to the producer) would be gained by relocating the proposed structure or disallowing it altogether. If this is the case, there would be no reason to require additional design standards. The commissioner will provide written determination to support any decision in these situations.

Comment: 327 IAC 16-8-4(4); Remove the first reference to "rainfall and" and the second reference to "and runoff". (USDA)

Response: It is not possible to differentiate between rainfall and run-off that falls on, or is diverted to, a specific drainage area.

Comment: 327 IAC 16-8-5; It is unclear in this section when using an emergency spillway what the freeboard elevation is in relation to the emergency spillway. The emergency spillway crest should be placed at 2 feet above the design full elevation. The top of embankment should be 6 inches above the designed flow of the emergency spillway. (USDA)

Response: The requirement of two (2) foot of freeboard holds true for all lagoons. Lagoons, and all other waste management systems, must be approved by the department. IDEM will use NRCS standards to determine if a structure should be approved.

Comment: 327 IAC 16-8-5(c)(1)(C); What is an approved vegetative management system? Definition? (BE)

Response: The definition for "vegetative management system" is in 327 IAC 16-2-42. Vegetative management systems are those that allow for the settlement of solids, and the treatment of the "water" through a settling basin. Such systems may be approved for non-federal CAFO's. More specific information is listed under 327 IAC 16-8-10. Designs specifications are also available through NRCS Technical Guidance Standards.

Comment: 327 IAC 16-8-5(c)(2); Does the terminology "designed to handle the runoff" mean contain or discharge without overtopping any berms? (BE)

Response: The intent is for the emergency spillway to be designed so that no discharge will occur from the spillway. All "waste management systems" must be constructed and maintained to avoid unpermitted discharges to waters of the state. This reference specifically references the requirement to handle the run-off from a fifty (50) year, twenty-four (24) hour precipitation event. The requirement of two (2) foot of freeboard should be able to handle this requirement for earthen basins.

Comment: 327 IAC 16-8-6; The issue for leakage through a concrete tank is not the permeability of concrete, but the potential through cracking and joints. There is no design procedure for designing a concrete tank based on the permeability of concrete. Leakage from concrete tanks is addressed by the six items listed under 327 IAC 16-8-6, section 6. (USDA) Several concrete standards are quoted in subjective terms. What is the reference standard? If ACI 318 is what you are looking for, state it and take out the guess work. (BE)

Response: IDEM has removed the seepage rate in relation to concrete storage structures. Some specific standards in this section and national standards commonly used by engineers in dealing with concrete have been addressed. Specific examples of construction are also contained in the guidance document.

Comment: 327 IAC 16-8-7(b); This subsection has a seepage rate of up to 1/16 inch per day in an approved earthen manure storage structure. Isn't this supposed to be a "zero discharge" industry? A one-acre lagoon has 43,560 square feet surface area. Leaking 1/16 inch would result in nearly 1,700 gallons loss. Is this what IDEM considers minimum? (JTAR)

Response: Confined feeding operations are a "zero" discharge industry. The seepage rate referenced is a standard set forth by NRCS and a national standard. IDEM believes the leakage rate of 1/16 inch per day is minimal.

Comment: 327 IAC 16-8-7(c); What are you asking the professional to certify to? What liability are you asking the professional to assume? (BE)

Response: The professional engineer is being asked to certify that the design is in accordance with accepted engineering practices. This requirement gives IDEM the assurance that lagoons are being designed and constructed in accordance with engineering practices. Through construction inspections, IDEM will also be able to ensure that construction of such waste management systems is done according to engineering design standards.

Comment: 327 IAC 16-8-8(a); Change to say "Solid manure storage structures must not be constructed in soils with a high percentage of sand and/or gravel and having a Unified Soil Classification of . . . liner." SC and GC soils are often less permeable than ML soils. We recommend that SC and GC soils be allowed for stacking areas. (USDA)

Response: IDEM does not believe that SC and GC soils should be allowed for storage areas.

Comment: 327 IAC 16-8-9; We suggest the consideration of required secondary storage for above ground manure storage structures. (BE)

Response: Under 327 IAC 16-4-3, the Commissioner has the authority to require additional environmental protection measures. With the specific standards required in the rule, IDEM believes that it has the ability and specific standards to ensure environmental protection. IDEM does not believe it is necessary to specify secondary storage in the rule.

Comment: 327 IAC 16-8-9(b)(5); Is "aboveground" one or two words? (USDA)

Response: "Aboveground" is one word for the purposes of this rule.

Comment: Large animal feeding operations should be required to have their manure storage structures inspected by a qualified professional before use to protect valuable water supplies. (BBAN) (MAM) (SWT) (STD) (TRK) (RHI) (PLCC) (JKE) (FDH) (DCU) (JSW) (HEC) (SLOE) Large operations should have to treat their wastes in a treatment facility as do towns and cities. (JSW)

Response: IDEM plans to conduct construction inspections to ensure that construction follows the design standards and drawings submitted and approved by IDEM. Those operations constructing an earthen structure must also have plans certified by a professional engineer (327 IAC 16-8-7(c)). U.S. EPA regulations do not currently allow treatment facilities for manure for large operations that are considered concentrated animal feeding operations (CAFOs).

Comment: Confined feeding operations should be required to monitor ground water and detect leaks before they become disastrous. (BBAN) (MAM) (SWT) (STD) (TRK) (RHI) (PLCC) (JKE) (FDH) (DCU) (JSW) (POW) (HEC) (SLOE) (JSTR) A monitoring system is necessary to serve as an early warning system for protection of Indiana's underground water resources. This would ensure that any contamination is detected promptly so that the cost of clean up will not be shifted to taxpayers at some later date after the company has made its profits and closed its doors. (HEC) (SLOE) Surface water monitoring needs to be stepped up. IDEM can no longer ignore field tiles as non-point sources of pollution. (HEC) (SLOE)

Response: IDEM can require monitoring wells if deemed necessary to protect human health or the environment under 327 IAC 16-8-3(c). IDEM does not believe monitoring is needed for all confined feeding operations. Specific examples of when groundwater monitoring would be required will be addressed in guidance.

Comment: What protection to ground water is given by the current draft rule? (JTAR)

Response: The rule contains various best management practices that will help protect ground water. All operations are also held to standard of "avoiding unpermitted discharges to waters of the state" (including groundwater).

Comment: 327 IAC 16-8-12(b); This section should specify that the owner/operator must notify the commissioner "on or before the date construction . . . begins," unless IDEM intends to allow an additional small amount of time, e.g., 10 days after commencement of construction, to get the notice out. It should be clarified whether this section means that the notice must be postmarked no later than the date construction begins, or that the Commissioner must receive the notice no later than the date of commencement of construction. (ELC)

Response: Notification of commencing construction allows construction inspectors to conduct inspections and

ensure that buildings are built to the specifications and designs submitted to IDEM for approval. IDEM believes the language in the rule is sufficient.

Comment: 327 IAC 16-8-12(d); Can the construction completion affidavit be partial? We are thinking about large systems where one overall permit was granted but the first few buildings could be constructed with fully functional manure management systems. Would populating on a partial basis be allowed? (BE)

Response: Populating on a partial basis would be allowed as long as it could be shown that adequate manure storage time existed. The intent of this requirement is for IDEM to follow-up with inspections on the storage structure prior to the introduction of animals.

Comment: 327 IAC 16-9-3; Does run-off and run-on control mean "covered"? (BE)

Response: "Covering" manure may be one way to achieve run-off and run-on control, but there could be others, such as diverting rainwater away from manure, or containing run-off that has come into contact with manure.

Comment: 327 IAC 16-9-3(a); Rather than requiring run-on and run-off control, which the rule does not define, this section should require that composting operations must be managed so that the materials they contain are not spilled. (ELC)

Response: Manure composting has been removed from this section. Dead animal compost may be land applied if in accordance with the manure application requirements in the rule. The run-on and run-off control requirement will help ensure that the compost is managed so that it is not spilled.

Comment: Compost created with manure has not been thoroughly addressed in the draft. This should be part of the final rule so that compost makers and users know what is allowable under this rule. If the compost is made under established "best industry standards and guidelines", the final product would contain no harmful pathogens and therefore, should be excluded from this rule. 327 IAC 16-9-3 does not recognize the difference between compost and manure. This should be addressed and corrected. (JRT)

Response: Manure compost is no longer addressed in 327 IAC 16-9-3. Composted materials and manure compost are further addressed in the guidance document. Under 327 IAC 16, all manure (even if it is mixed with composted material) must be handled as manure for storage, transport, and land applied.

Comment: 327 IAC 16-9-4; A section (d) should be added which explicitly allows an owner/operator to comply using any spill response plan, developed for any purpose, which meets the requirements of 327 IAC 16-9-4(b) and (c) and is modified as needed to include manure, contaminated runoff, and waste liquid. Complex operations may already have developed sophisticated spill response programs, and this rule should not require them to create a separate spill response plan for manure. To accommodate this, the requirement at 327 IAC 16-9-4(a)(2), should be changed to require that the plan must be available for inspection at any time. (ELC)

Response: This rule does not require a separate plan. Any plan that meets the requirements of 327 IAC 16-9-4 can be used to meet this requirement.

Comment: 327 IAC 16-9-4(a)(4); Plan specified procedures should also be included in the requirement. (BE)

Response: Further information, including an example of the emergency spill response plan are included in the guidance document. Familiarization of the specific details in the plan may vary from operation to operation, and are covered in the guidance document.

Comment: 327 IAC 16-9-4(b); The term "accessible to all employees" seems overly broad, particularly for operations, such as the Lilly Greenfield Laboratories research operations, where many employees are not directly involved in any aspect of a confined feeding operation. This might be better phrased "accessible to all employees directly employed in operating or managing the confined feeding operation." (ELC)

Response: Under 327 IAC 16-9-4(a), it specifically lists that those employees involved in the manure handling are the ones that must be familiar with the plan. Additional specifications for familiarity of emergency spill response plans are included in the guidance document.

Comment: 327 IAC 16-9-4(c)(2); Does this include travel to spreading areas? (BE)

Response: The emergency spill response plan should discuss how to handle transportation spills. Manure under transport is still under control of the operator. All practices (including transport) must be conducted in accordance with 327 IAC 16-10.

Comment: 327 IAC 16-9-5(a)(1); This should be changed to clarify that the operation need retain only currently valid approvals and modifications, and not prior approvals which have been replaced through renewals. (ELC)

Response: Prior approvals that have been replaced are not considered "valid" approvals. It may be helpful to retain old approvals for historical purposes, but it is not required by the rule.

Comment: 327 IAC 16-9-5(b); The reference to 327 IAC 16-9-4(a) duplicates the requirement at 5(a)(3), while that to 16-9-4(b) is irrelevant as the section does not require a record. (ELC)

Response: IDEM concurs and has corrected the citations.

Comment: Land application records should be available to the public. (HEC) (SLOE) IDEM's proposed rules do not do enough to encourage public participation. We believe that Indiana's rules allowing a CAFO's operating records with respect to manure application and other procedures to be kept privately on site will discourage public participation. (CAC)

Response: Any records at IDEM are available to the public. Records kept at a confined feeding operation are not available to the public unless released by the owner or operator of the operation. If a problem exists at any confined feeding operation, IDEM will investigate and review the records to resolve the problem.

Comment: Producers should not be required to keep detailed land application records if they have enough land under their control for application. (GS)

Response: If the producer does not keep records of tests, application rates, etc., then there is no assurance that the manure is being used as a nutrient. Sufficient acreage does not mean it is used appropriately.

Comment: 327 IAC 16-10-1; In section 1, paragraph (d), why does this read "to the satisfaction of the commissioner" rather than "generally accepted scientific methods"? By allowing this to be determined by the satisfaction of the commissioner, it allows a decision to be influenced by emotional issues rather than scientific data. (RAF-CE)

Response: Subsection (d) clearly describes the type of site-specific information that is needed to satisfy the commissioner or an authorized IDEM staff person that a smaller amount of acreage for manure application will be equally protective of human health and the environment. These items include: type of manure generated, alternate methods of managing manure, innovative technology, or other criteria related to protection of human health or the environment. The commissioner will use this information to make science-based decisions on the approval.

Comment: The rule should limit the amount of manure that can be applied to cropland to minimize phosphorous runoff into streams and lakes. IDEM should require landowners to demonstrate soil phosphorous retention capability before approving land application on a given site. (HEC) (SLOE) The rule ignores the consideration of phosphorous as a limiting factor. Why are important nutrients left out of the rule? Applying lagoon water at agronomic rates for nitrates can easily exceed the phosphorous needed by five to twenty-five times. (JTAR)

Response: Phosphorous has been identified as having a potential maximum range within the soil before it also becomes mobile and lost via leaching. Extensive research is being conducted by academia and IDEM will be informed when a consensus of recommendations relative to phosphorous limits are formulated. IDEM will be studying phosphorous in watersheds over the next two years. The proposed rule provides a mechanism to recognize phosphorous as a limiting factor in the future if necessary. Additional information about phosphorous soil parameters will be addressed in guidance.

Comment: Manure should be treated to remove pathogens and odors as is done with municipal sludge. (HEC) (SLOE)

Response: The proposed rule does not address odors. The pathogens in manure are not the same as those found in municipal sludge. Compliance with the requirements of this rule should protect human health and the environment

from any pathogens that are present. IDEM does not feel pathogen treatment is necessary.

Comment: All liquid manure should be injected. Surface spreading allowed only from October 15th through March 15th, with no setbacks from roads, only wells if injected. Allow producers 3 years to get into compliance with complete injection. (GS)

Response: IDEM is not requiring injection. IDEM believes the rule provides the appropriate level of protection.

Comment: To be effectively used as a fertilizer, manure must be applied not only at fertilizer rates, but it must be applied at the appropriate time of year and to fields that will actually be cropped. On sites where field tiles provide direct conduits to surface waters, manure application should be strictly limited to prevent pathogens, nitrogen and phosphorous from entering streams. Manure application of frozen ground should be banned. (HEC) (SLOE)

Response: IDEM believes the proposed rule adequately addresses these issues.

Comment: Liquid manure is much more difficult to manage than solid manure. Consistency of manure is still an issue. (LAW)

Response: IDEM agrees and the rule requirements reflect the differences between liquid and solid manure.

Comment: 327 IAC 16-10-3(a); Manure staging should provide an alternative that allows for the use of a concrete pad with drainage to a filter bed rather than the use of a cover. The requirement that the manure be applied within 90 days should be changed to provide that the manure must either be applied or used as an amendment to compost within 90 days. (ELC) Staging time should be increased from 3 days to 7 days to accommodate the farmer's constrained spreading time, and because dry manure will usually absorb water and can form a crust. (WVP) Staging limits should be at least 7 days. (KJP) Dry manure staging limited to 72 hours or it must be covered or otherwise protected creates a possible fire and safety hazard. I am not sure what constitutes otherwise protected, but covering manure as suggested can create a fire hazard as the dry stack goes through the natural process of composting. Extending the 72-hour time frame to 30 days will allow more flexibility in land applying the material under more suitable field conditions without creating a health risk. (PFI) There should be procedures to allow variances to the stockpiling rules when we can demonstrate no potential for contamination. When our material is stored in field locations it has minimal odor, very few flies, crusts over rapidly, absorbs rainfall, and poses no hazard to the environment. When stored on a concrete pad, or in an open or closed building, it becomes anaerobic and becomes a nearly liquid, black, smelly ooze that is extremely offensive and impossible to handle. (PSH) (ISPA)

Response: The proposed rule already allows for a longer staging time if the manure is covered or otherwise protected. Flexibility has been provided in 327 IAC 16-5 for alternate design or compliance approaches and innovative technology that may be approved for use in place of a requirement in the rule. If an applicant can demonstrate that a particular type of manure does not pose a problem when staged at the land application site, a longer staging time can be approved.

Comment: Animal production sites generating solid waste are not an environmental threat. Manure staging at land application sites is much more of a concern and still not a major issue. (LAW)

Response: Problems have been seen at both types of sites when the manure is poorly managed.

Comment: 327 IAC 16-10-3(c)(1); It will be very difficult for smaller operations to have constant supervision of spray irrigation. If the equipment is checked before application begins and periodically checked during the spraying process, that should be sufficient. (VLS)

Response: Constant supervision is only one method of complying with the provision. Spray irrigation may also be conducted if there are devices to detect pressure loss, or in accordance with an approved spray irrigation plan. Flexibility has been provided in 327 IAC 16-5 for alternate design or compliance approaches and innovative technology that may be approved for use in place of a requirement in the rule.

Comment: 327 IAC 16-10-3(c)(3); Remove the words "by Natural Resources Conservation Service", as we do not develop spray irrigation plans. (USDA)

Response: The reference to "Natural Resources Conservation Service" has been removed.

Comment: 327 IAC 16-10-3(f); Our current draft language on this topic says, "Wastes shall not be applied to frozen, snow-covered, or saturated soil if the potential risk for runoff exists from edge of field or via surface tile inlets". (USDA)

Response: Changes have been made to this subsection to include snow covered ground. New subdivisions have been added for clarification.

Comment: Manure should be applied to fields only in small amounts, at certain times of the year, and during certain conditions. Spray application of liquid manure should be banned. (POW)

Response: IDEM believes the current rule provisions for manure application are appropriate. Requirements for land application are included in the rule. Specific requirements in 327 IAC 16-10 include calculations for land application to ensure proper application rates, and compliance with land application requirements. Such details require producers to apply manure at a rate at which the soil and growing plants can utilize the available nutrients.

Comment: Setbacks for dry manure should be 100 feet because it is dry and does not seep. Making the setbacks 300 feet reduces the amount of land that producers may spread. (KJP) The application setbacks for dry manure are too restrictive. (PSH) (ISPA) Farmers object to having to use fertilizer in areas restricted by the setbacks. (PSH) (ISPA)

Response: The setbacks for solid (dry) manure application in the rule is currently fifty (50) feet from surface waters, sinkholes, wells, and drainage inlets. It is ten (10) feet from property lines and public roads. The setback from public water supply wells and public water supply surface intake structures is five hundred (500) feet to protect drinking water sources. These distances are listed in Table 1 in 327 IAC 16-10-4(a) in the second column. IDEM believes these are appropriate for protection of human health and the environment.

Comment: 327 IAC 16-10-4 Table 1; Since "water & sediment control basins" are included in the definition of "drainage inlet", they should be combined under the "drainage inlets" subheading below "Known Feature". (USDA) Suggest that this table be expanded, maybe turned sideways into the landscape position for clarity, if that does not violate the required form. (BE)

Response: Because "water and sediment control basins" are included in the definition of "drainage inlet", there is no need to duplicate it in the table. The table, when published by the Legislative Services Agency, will be in their standard format.

Comment: Keep setbacks in place as of the 1998 rules. (GS)

Response: IDEM believes the setbacks in the rule are appropriate based on past experience with the confined feeding operation program.

Comment: 327 IAC 16-10-4(e); The NRCS Field Office Technical Guide standard for "Filter Strips" (released April 2000) no longer includes language to address minimum requirements of filter strip widths for various land slopes found in a field. Instead, it states that "to reduce sediment, particulate organic matter, and sediment absorbed contaminant loading in runoff that the filter strip shall have a minimum flow length of 20 feet. It also states that "to reduce dissolved contaminants in runoff" the flow length shall be at a minimum, an additional 30 feet. Filter strips help most with surface runoff. Change to read, "If a properly designed and maintained filter strip, a minimum width of (20' or 50' - either distance will work), is located between the application site and : (1), (2 - remove language including "Any known well"), (3) and (4): then the setback distance is decreased by ½. (USDA) What standards are to be used for filter strip design? Suggest referencing the appropriate NRCS Standard. (BE)

Response: IDEM does not believe any further detail is necessary in the rule. The guidance document will reference the NRCS standard.

Comment: IDEM needs to collect data on the issue of dry manure and the safe handling practices of this product prior to publication of the guidance document. A detailed questionnaire on this subject should be sent to all confined poultry feeding operations in the state. (JRT)

Response: IDEM continues to be interested in any information on this issue. IDEM may consider questionnaires or other data collection mechanisms in the future.

Comment: There should be different setback rules for solid manure than for liquid manure. There should be some type of procedure to allow variances to these setbacks whenever it can be demonstrated that there is no potential for contamination. (PSH)

Response: There are different setbacks for solid manure than surface application of liquid manure in 327 IAC 16-10-4(a) in Table 1.

Comment: 327 IAC 16-10-5(a); This section should be removed or modified to contain an exception for commercial manure sales, where manure is frequently packaged and repackaged and sometimes mixed with manure from other operations. This section might subject such commercial operations to the unenviable task of segregating manures. This would be unduly burdensome. (ELC)

Response: The rule contains the flexibility to modify this requirement if approved by the Commissioner in accordance with 327 IAC 16-5.

Comment: 327 IAC 16-10-5(b)(3); This section should define which nutrients must be quantified for the purchaser. (ELC)

Response: IDEM will provide further information in the guidance document or nutrient content.

Comment: 327 IAC 16-11-1; Where is section 4? (USDA)

Response: There is no section 4. The reference to section 4 has been deleted.

Comment: 327 IAC 16-11-3(a)(2); If the recommended changes to the definition of "spill" are adopted, the undefined term "release" in this section should be changed to "spill" for clarity. (ELC)

Response: IDEM has made changes to this provision so that the term "release" is no longer used. IDEM does not believe the definition of "spill" needs to be changed.

Comment: Why do we need all these new rules that require 98% of producers who have little or no problems to suffer and keep unneeded records because of those who did have serious problems? (GS)

Response: Without records and testing, manure is not being used appropriately as a nutrient which presents a threat to water quality. IDEM does not believe the records to be kept are burdensome.

Comment: The Water Pollution Board should next look into the segment of the agricultural community that will not be covered by the confined feeding rules. There are some problems in this area that should be addressed. One example would be allowing livestock unlimited access to waterways that could convey byproducts into contact with drinking water sources. (JRT)

Response: IDEM agrees that this issue may deserve future attention.

Comment: I am concerned about how manure is treated differently from inorganic sources of fertilizer. Commercial fertilizer can cause water quality problems near tile risers and streams, but is not addressed anywhere. (MLE)

Response: Although Indiana does not have a specific regulatory program governing the application of commercial fertilizers, they must be applied in compliance with the Environmental Management Act, IC 13-30. The State Chemist's office regulates the sale and storage of commercial fertilizers. IDEM recognizes that the use of manure for fertilization purposes involves the application of significantly larger quantities of material per acre compared to the quantities of fertilizer per acre to get the same result. Manures also contain bacteria and other microorganisms that have the potential to cause human illness if the manure enters an aquifer or well.

Comment: IDEM should look at the manure handling program that the Illinois Environmental Protection Agency and the Water Pollution Board have put together in cooperation with the University of Illinois and the Cooperative Extension Service. They have produced a certified livestock manager's manual. The Extension Service offers this certification course to any manager, even those not currently under this jurisdiction and provides annual updates to currently certified managers. (JRT)

Response: IDEM is evaluating certified manager programs for possible implementation in Indiana.

Comment: At a minimum, this rule should require best management practices that minimize emissions by covering manure handling areas whenever possible. IDEM clearly has a statutory mandate to protect the quality of life for Indiana residents. (HEC) (SLOE) The rules should address air quality or odor issues using information from other states. (JSTR)

Response: The draft rule does not regulate odor or air emissions generated at confined feeding operations. The intent is to allow IDEM to consider site specific conditions that may warrant increased setbacks to protect sensitive waters and human health. Some best management practices such as shorter setbacks for incorporation or injection have been incorporated to address the problem. The guidance may contain specific recommendations for odor control/reduction.

Comment: In its latest response to comments, IDEM states that it will continue to research issues related to air pollution and odors from CAFOs and take any appropriate action. I would like to know what research IDEM has done so far, and where can I get a copy of it? Does IDEM have a current program specifically designed to monitor and or research the affects of large CAFOs can have on air quality? If so, how long will the study last before results are published? Is IDEM aware of research being carried out and released by other states concerning hydrogen sulfide emissions? I would appreciate IDEM publishing a quick report on what affects it believes hydrogen sulfide exposure can have on humans, especially developing children. (CAC)

Response: The proposed rule does not address odor or other air quality issues. IDEM would be glad to discuss odor related issues with this commentors outside of this rulemaking process.

Comment: IDEM's proposed rules have an inadequate inspection program. Each CAFO that falls under the rules should be inspected at least once a year. This inspection should be unannounced and should be conducted by someone other than the regulated party or someone who does not hold a financial interest in the operation. It is unacceptable for IDEM's rules to have no mandatory inspection program except for the self-inspections performed by the owner/operators. (CAC)

Response: IDEM's inspectors visit confined feeding operations. IDEM prioritizes inspections based on resources and threats to human health or the environment. The number of inspections has increased dramatically in recent years and IDEM is committed to an effective compliance and enforcement program for confined feeding.

Comment: I really dislike seeing conservation officers get involved in this matter. Having them walk all over your property looking for something, spill or whatever, and no plastic boots on for protection (disease). You question him or her about coming on your land and you are told that he or she has authority to do this. I really do think this matter could get out of hand. (MOF)

Response: Conservation officers are not under the jurisdiction of IDEM.

Comment: People move into the country with their new house, dog, and children, etc. They don't want any animal smell whatsoever. My suggestion is for them to stay in town. You are always going to have farm animals in the country. (MOF)

Response: The proposed rule does not address odor.

Comment: When you say a violation does not have to be a discharge or an enforceable violation. This rule sounds crazy and I don't understand it. If a conservation officer is dishonest, he could arrest you for about anything. This is not a fair process. This could be a real pain for even the smallest hog farmer. (MOF) We find that a violation does not have to be a discharge or an enforceable violation. Now we find out IDEM will decide what is a violation. Violations should not be on our record for life. Why can't we have a time limit on how long a violation stays on our record? (EGL) Having rules that do not say what a violation is leaves it open for IDEM to make up their own rules along the way. (JA)

Response: The purpose of these rules is to establish what must be done to stay in compliance; failure to stay in compliance is a violation.

Comment: Why not have qualified inspectors tour our farms once per year instead of allowing the state to access records we are mandated to keep? We could use the county agents as qualified inspectors of neighboring counties so they

don't inspect their own neighbors. The operations that are the 2% problems should be fined heavily and not allowed any expansion until they prove they can operate within current rules. (GS) In a two-year study, 79% of documented spills were accidental, and 21% were intentional. Education may have some impact in future spill prevention. Enforcement may divert some intentional spills. (LAW)

Response: IDEM is constantly seeking to improve it's compliance and enforcement strategy to most effectively address environmental issues.

Comment: Mismanagement during the storage of animal waste is most often the cause of a spill. In a two-year study, 39% of spills occurred during storage. (LAW)

Response: The rule addresses this problem.

Comment: Other observations would include the low frequency of land application discharge problems or that seasons and occupation of land by crops have a significant effect. (LAW)

Response: In the last year, the number of reported or observed land application discharge problems has increased. Weather conditions, management, and land usage do seem to have a significant effect.

Comment: Those producers with storage of greater than 240 days should be inspected every 2 years. Producers with less than 240 days storage, or lagoons should be inspected yearly. Any producer found with violation of current rules must be inspected yearly and allowed no expansion for a minimum of 2 years. Also, large fines for any spills. (GS)

Response: IDEM is constantly reviewing our inspection frequency and strategy based on resources and threats.

Comment: As I reviewed the rules set forth for pork producers there seems to be a lack of certainty in your rules proposal. I am wondering if you are keeping the rules open to where you can add to or change them to suit someone or group? You also leave open the possibility that any pork producer could be challenged on the feeding operation they have. Some farmers may not keep the kind of records you expect. I feel the government is getting too intrusive into people's livelihood, often causing undo financial burden. (RMA)

Response: IDEM believes all producers are being treated fairly. IDEM has spent three years developing a regulation in a manner involving interested parties, including agricultural industry representatives.

Comment: In your comments you mention "what has been proposed by IDEM and the environmental activist community." This troubles me in that often the environmental activists have no research to back up their position and is based on their "thinking" which can be seriously flawed. Also, I have wondered what educational background the IDEM people have? If they do not have a fairly solid background in chemistry and biology, they are not really qualified to be making decisions on environmental problems. When research shows a need for change or correction for the benefit of our society, I favor it. (RMA)

Response: IDEM staff have a solid background in chemistry and biology, and a number of years of environmental and agricultural experience.

Comment: Who is ultimately responsible for all these issues? There are too many agencies involved. (JSTR)

Response: Rules adopted by the Water Pollution Control Board regarding confined feeding will be implemented and enforced by IDEM.

Comment: If a producer has a water quality problem, IDEM should do whatever is necessary to get the problem corrected. But it is incorrect to think all producers are violators of sound management. (REW)

Response: IDEM concurs.

Comment: I hope your rules turn out to be a positive note. Being that you have conservation officers involved, I don't think there will be. Request you use fairness and common sense in rule making. (MOF)

Response: Conservation officers are not under the jurisdiction of IDEM. IDEM believes all producers are being treated fairly. IDEM has spent three years developing a regulation in a manner involving interested parties, including agricultural industry representatives.

Comment: The fact that "pathogen" and "antibiotic" are not mentioned in the draft rules is a callous disregard for human health and environmental well-being. (SLOE)

Response: IDEM believes that compliance with this rule will protect human health and the environment from pathogens in manure.

Comment: I am concerned about our liability if the farmer we contract with has a spill. Our contract states that he assumes all liability for storing and handling the manure. The rule does not explicitly state that I will not be at fault for something he does. Likewise, many producers contract with a firm to haul and inject their manure. The producers I have spoken with believe the hauler is liable if a spill occurs. This needs to be clarified and part of the educational effort. (MLE) IDEM should add a provision that allows contract language to define responsibilities as in IC 13-30-9-3(b). (MHI) (TDB) (JA) (DHI) (RAT) (SHI) (JER) (JER-2) (JTAY) (IPPA) (MCY) (MMA) (BE) (CMR) Why can't IDEM honor contracts as to who is responsible for what? (EGL) The increased liability put on contractors who work with hog operations is a problem. (JUA) (JA)

Response: The provision in IC 13-30-9-3(b) is in reference to environmental legal actions (i.e., court cases) "against a person who caused or contributed to the release of a hazardous substance or petroleum into the surface or subsurface soil or groundwater . . . ." IDEM does not equate manure with "a hazardous substance of petroleum". Liability in cases of a spill or discharge must be determined based on the specific situation in which the violation occurred. This rule does not affect any remedy any party has under a contractual agreement. In case of a violation, IDEM pursues action against the responsible decision maker at a facility. As a contract may assist with clarifying responsibility, IDEM will use that information appropriately.

Comment: We are concerned that the proposed rule includes several instances where the Commissioner has over reaching authority and discretion with seemingly undefined boundaries. (ISPA)

Response: IDEM does not agree that the rule provides the Commissioner with "over reaching authority and discretion with seemingly undefined boundaries".

Comment: The complexity and extreme detail of the rule are an overall concern. The ability to adjust to site specific situations must be preserved for confined feeding operations to maintain economic viability. Environmental rules and policy should offer clarity to the regulated community so they understand their role in environmental protection. Every effort should be made to simplify the rule to allow clarity of expectations to the agricultural community. (IFB)

Response: After working for 3 years with the agricultural community, IDEM believes the rule is understandable, practical to implement and effective at protecting water quality.

Comment: I believe that a large educational effort will be needed to inform producers of the changes in the rule and what is required to be in compliance, particularly with the record keeping requirements. IDEM should partner with Purdue University Extension and the Indiana Pork Producers Association to carry this out. (MLE) IDEM will need to finance and implement an educational effort to insure maximum compliance with the rule. (IPPA)

Response: IDEM will continue to work with Purdue University and producer groups to implement educational outreach and maximize compliance.

Comment: How many confined feeding operations are there in Indiana? (HEC)

Response: IDEM has valid confined feeding operation approvals for 2199 operations. IDEM does not have a listing confined feeding operations not subject to this rule.

Comment: What was the average size of a confined feeding operation 5 years ago? (HEC)

Response: IDEM does not have this information.

Comment: How many operations were over 1,000 animal units 5 years ago? (HEC)

Response: IDEM does not have this information.

Comment: How many applications for new confined feeding operations has IDEM received in the past 5 years? (HEC)

Response: IDEM has received 841 new confined feeding applications over the past 5 years.

Comment: What is the average size of a confined feeding operation added in the past 5 years? (HEC)
Response: IDEM does not have this information.

Comment: How many applications have been appealed in the last 5 years? (HEC)
Response: Of the 968 approval letters issued in the last 5 years, 47 (4.8%) were appealed.

Comment: How many monitoring wells will be required by this rule? (HEC)
Response: It is not possible to estimate the monitoring wells that may be required by this rule. IDEM has required monitoring wells at sites where is was appropriate, and will continue to do so.

Comment: How will IDEM ascertain whether nitrogen has been applied at fertilizer rates? (HEC)
Response: IDEM will review records kept in the operating record at the facility and conduct sampling as needed.

Comment: Will IDEM check to see whether land application has occurred on acreage as indicated in landowner agreements? (HEC)
Response: The landowner agreements are to demonstrate that a minimum acreage for manure application has been obtained. The producer may apply to other land as long as it does not exceed the appropriate application rate.

Comment: How many streams in this State are unsuitable for swimming due to E. coli? (HEC)
Response: IDEM refers the commentor to the Indiana Section 305(b) report, the Section 303(b) listing of impaired waterbodies and the IDEM State of the Environment report.

Comment: How will IDEM ensure that land application of manure does not exacerbate E. coli problems? (HEC)
Response: The best management practices in the rule should serve to control E. coli problems from manure application.

Comment: Why doesn't this rule require manure to be treated to kill pathogens as is required for land application of sewage sludge? (HEC)
Response: The pathogens in manure are different than the pathogens in sewage sludge. In addition, IDEM believes compliance with the requirements of this rule will protect human health from any pathogens in the manure.

Comment: How many waters of the State have unhealthy levels of phosphorous? (HEC)
Response: IDEM does not have this information.

Comment: How will IDEM prevent phosphorous runoff if there are no phosphorous limits in the rule? (HEC)
Response: Phosphorous will be controlled through the use of best management practices combined with site specific requirements as appropriate.

Comment: How much copper is typically in hog manure? (HEC)
Response: IDEM does not have this information.

Comment: Will IDEM inspect earthen lagoons or concrete pits before they are put into use? (HEC)
Response: IDEM will be inspecting facilities under construction.

Comment: Does IDEM think operators are qualified to certify that concrete was poured according to design standards? (HEC)
Response: The requirement is intended to place the responsibility of certifying proper construction on the operator. If the operators do not believe they are capable of signing the construction affidavit certifying compliance, then an engineer or manager should be hired.

Comment: What will happen when a confined feeding operation contaminates underground water supplies? (HEC)

Response: The owner/operator would be responsible for remediation.

Comment: What happens when runoff from land application of manure causes fish kills? (HEC)
Response: An enforcement case would be initiated as appropriate.

Comment: Is there an enforcement or cleanup requirement in the rule? (HEC)
Response: Statutory requirements cover enforcement and clean-up requirements.

Comment: How does IDEM determine what caused a fish kill? (HEC)
Response: IDEM uses site specific investigations to determine the cause of a fish kill.

Comment: How does IDEM determine the source of ground water contamination? (HEC)
Response: IDEM uses site specific investigations to determine the cause of ground water contamination.

Comment: A couple of years ago, there was a report that women in LaGrange County had miscarriages due to nitrates in their well. Has IDEM determined the source of those nitrates? (HEC)
Response: IDEM does not have this information.

Comment: Did IDEM notify the citizens who initially petitioned for this rule of official comment periods? (HEC)
Response: There is no formal requirement of notice to any group when the draft rules are presented to the Water Pollution Control Board. A notice is always placed in the *Indiana Register* to serve as notice to all citizens. IDEM has strived to keep all interested persons notified of formal and informal opportunities for comment.

Comment: Did IDEM notify the people of subsequent rule developments if they attended the first hearing on the confined feeding rule held in response to the citizen's petition for rules? (HEC)
Response: IDEM did not specifically notify all persons attending the hearing held before the Water Pollution Control Board in response to the citizen's petition. However, at the time, a first notice for the confined feeding rule was being published in the Indiana Register. All public notice requirements related to rulemaking under Indiana statutes were followed. In addition, many workgroup meetings on the confined feeding rule were held and notice of such meetings was provided to all interested parties and was posted on IDEM's website.

Comment: Did IDEM notify the confined feeding operators who attended the public meetings about official comment periods? (HEC)
Response: IDEM did not conduct a mailing to meeting attendees.

Comment: Will IDEM require best management practices for land application of manure? (HEC)
Response: The setback requirements and testing and applying manure at rates based on crop demand and soil levels are considered best management practices.

Comment: Does the proposed rule minimize odors? (HEC)
Response: The proposed rule does not directly address odors.

Comment: What assurances do we have that neighbors won't suffer from exposure to severe odors? (HEC)
Response: The proposed rule does not directly address odors.